SERFF Tracking Number: PNMU-125593294 State: Arkansas
Filing Company: Penn Mutual Life Insurance Company State Tracking Number: 38712

Company Tracking Number: FL-08(S)(AR), ETC.

TOI: L091 Individual Life - Flexible Premium Sub-TOI: L091.001 Single Life

Adjustable Life

Product Name: Flexible Premium Adjustable Kife

Project Name/Number: FL-08(S)(AR), etc. /FL-08(S)(AR), etc.

#### Filing at a Glance

Company: Penn Mutual Life Insurance Company

Product Name: Flexible Premium Adjustable SERFF Tr Num: PNMU-125593294 State: ArkansasLH

Kife

TOI: L09I Individual Life - Flexible Premium SERFF Status: Closed State Tr Num: 38712

Adjustable Life

Sub-TOI: L09I.001 Single Life Co Tr Num: FL-08(S)(AR), ETC. State Status: Approved-Closed

Filing Type: Form Co Status: Reviewer(s): Linda Bird

Author: Rita Bellew Disposition Date: 05/01/2008

Date Submitted: 04/15/2008 Disposition Status: Approved

Deemer Date:

Implementation Date Requested: Implementation Date:

State Filing Description:

#### General Information

Project Name: FL-08(S)(AR), etc. Status of Filing in Domicile: Pending

Project Number: FL-08(S)(AR), etc.

Requested Filing Mode: Review & Approval

Explanation for Combination/Other:

Submission Type: New Submission

Overall Rate Impact:

Date Approved in Domicile:

Domicile Status Comments:

Market Type: Individual

Group Market Size:

Group Market Type:

Filing Status Changed: 05/01/2008 State Status Changed: 05/01/2008

Corresponding Filing Tracking Number: FL-08(S)(AR), etc.

Filing Description:

Please see NAIC Transmittal

#### **Company and Contact**

#### **Filing Contact Information**

Created by SERFF on 05/01/2008 12:57 PM

SERFF Tracking Number: PNMU-125593294 State: Arkansas
Filing Company: Penn Mutual Life Insurance Company State Tracking Number: 38712

Company Tracking Number: FL-08(S)(AR), ETC.

TOI: L091 Individual Life - Flexible Premium Sub-TOI: L091.001 Single Life

Adjustable Life

Product Name: Flexible Premium Adjustable Kife

Project Name/Number: FL-08(S)(AR), etc. /FL-08(S)(AR), etc.

Rita Bellew, State Filing Coordinator bellew.rita@pennmutual.com VIM C3G (215) 956-8290 [Phone]

Philadelphia, PA 19172 (215) 956-8145[FAX]

**Filing Company Information** 

Penn Mutual Life Insurance Company CoCode: 67644 State of Domicile: Pennsylvania

VIM C3G Group Code: 850 Company Type: Life Insurance and

Annuity

Philadelphia, PA 19172 Group Name: Penn Mutual Life Ins. State ID Number:

Co.

(215) 956-8893 ext. [Phone] FEIN Number: 23-0952300

-----

SERFF Tracking Number: PNMU-125593294 State: Arkansas

Filing Company: Penn Mutual Life Insurance Company State Tracking Number: 38712

FL-08(S)(AR), ETC. Company Tracking Number:

TOI: L09I Individual Life - Flexible Premium Sub-TOI: L09I.001 Single Life

Adjustable Life

Product Name: Flexible Premium Adjustable Kife Project Name/Number: FL-08(S)(AR), etc. /FL-08(S)(AR), etc.

**Filing Fees** 

Fee Required? Yes

\$120.00 Fee Amount:

Retaliatory? No

Fee Explanation: 2 policies X 50.00 = 100.00

1 rider X 20.00 = 20.00

Total = 120.00

Per Company: No

**CHECK NUMBER CHECK AMOUNT CHECK DATE** 

0842862 \$120.00 03/26/2008 

 SERFF Tracking Number:
 PNMU-125593294
 State:
 Arkansas

 Filing Company:
 Penn Mutual Life Insurance Company
 State Tracking Number:
 38712

Company Tracking Number: FL-08(S)(AR), ETC.

TOI: L091 Individual Life - Flexible Premium Sub-TOI: L091.001 Single Life

Adjustable Life

Product Name: Flexible Premium Adjustable Kife

Project Name/Number: FL-08(S)(AR), etc. /FL-08(S)(AR), etc.

#### **Correspondence Summary**

#### **Dispositions**

Status	Created By	Created On	Date Submitted
Approved	Linda Bird	05/01/2008	05/01/2008

SERFF Tracking Number: PNMU-125593294 State: Arkansas

Filing Company: Penn Mutual Life Insurance Company State Tracking Number: 38712

Company Tracking Number: FL-08(S)(AR), ETC.

TOI: L09I Individual Life - Flexible Premium Sub-TOI: L09I.001 Single Life

Adjustable Life

Product Name: Flexible Premium Adjustable Kife

Project Name/Number: FL-08(S)(AR), etc. /FL-08(S)(AR), etc.

#### **Disposition**

Disposition Date: 05/01/2008

Implementation Date: Status: Approved

Comment:

Rate data does NOT apply to filing.

 SERFF Tracking Number:
 PNMU-125593294
 State:
 Arkansas

 Filing Company:
 Penn Mutual Life Insurance Company
 State Tracking Number:
 38712

Company Tracking Number: FL-08(S)(AR), ETC.

TOI: L091 Individual Life - Flexible Premium Sub-TOI: L091.001 Single Life

Adjustable Life

Product Name: Flexible Premium Adjustable Kife

Project Name/Number: FL-08(S)(AR), etc. /FL-08(S)(AR), etc.

Item Type	Item Name	Item Status	Public Access
Supporting Document	Certification/Notice		Yes
Supporting Document	Application		Yes
Supporting Document	Health - Actuarial Justification		No
Supporting Document	Outline of Coverage		No
Supporting Document	Actuary Memorandums		No
Supporting Document	NAIC Transmittal		Yes
Supporting Document	Stmt of Variability		Yes
Form	Flexible Premium Adjustable Life Insurance Policy		Yes
Form	Flexible Premium Adjustable Life Insurance Policy		Yes
Form	Rider-Overloan Proteciton Benefit Agreement		Yes

 SERFF Tracking Number:
 PNMU-125593294
 State:
 Arkansas

 Filing Company:
 Penn Mutual Life Insurance Company
 State Tracking Number:
 38712

Company Tracking Number: FL-08(S)(AR), ETC.

TOI: L091 Individual Life - Flexible Premium Sub-TOI: L091.001 Single Life

Adjustable Life

Product Name: Flexible Premium Adjustable Kife

Project Name/Number: FL-08(S)(AR), etc. /FL-08(S)(AR), etc.

#### Form Schedule

**Lead Form Number:** FL-08(S)(AR)

Review Status	Form Number	Form Type Form Name	Action	Action Specific Data	Readability	Attachment
	FL- 08(S)(AR)	Policy/Cont Flexible Premium ract/Fratern Adjustable Life al Insurance Policy Certificate	Initial		50	Policy (S)(AR).pdf
	FL- 08(U)(AR)	Policy/Cont Flexible Premium ract/Fratern Adjustable Life al Insurance Policy Certificate	Initial		50	Policy(U)(AR) .pdf
	OPBA-08	Policy/Cont Rider-Overloan ract/Fratern Proteciton Benefit al Agreement Certificate: Amendmen t, Insert Page, Endorseme nt or Rider	Initial		53	OPBA-08.pdf

# The Penn Mutual Life Insurance Company

Founded 1847

Insured	William Penn	\$100,000	Specified Amount
Policy Number	00000000	April 1, 2008	Policy Date

The Penn Mutual Life Insurance Company agrees, subject to the provisions of this policy, to pay the Death Benefit to the Beneficiary upon receipt of due proof of the death of the Insured while this policy is in force and before the Maturity Date.

The Company also agrees to provide all of the other benefits stated in this policy.

This contract is made in consideration of the payment of premiums as provided in this policy.

The provisions on this and the following pages are part of this policy.

Executed on the Date of Issue by The Penn Mutual Life Insurance Company.

Managing Corporate Counsel and Secretary

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Chief Executive Officer

**FREE LOOK PERIOD** - This policy may be cancelled by returning it within 10 days after it is received by the owner. It must be returned to Penn Mutual or to the agent through whom it was purchased. This policy will then be considered void as of its inception. Any premium paid on it will be refunded.

**READ YOUR POLICY CAREFULLY.** This policy is a legal contract between the Owner and the Company.



# Flexible Premium Adjustable Life Insurance Policy

- Death Benefit payable at death prior to Maturity Date
- Maturity Benefit Payable at Maturity Date
- · Flexible premiums payable until Maturity Date
- Participating
- Supplemental benefits, if any, listed on Page 3

The Penn Mutual Life Insurance Company, Philadelphia, Pennsylvania 19172 FL-08(S)(AR)

# **Guide to Policy Sections**

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5	Lapse and Reinstatement	12	General Provisions
6	Policy Loans	13	Income Payment Options
7	Owner and Beneficiary	14	Income Payment Option Tables

Additional Policy Specifications, any supplemental agreements and a copy of any applications follow Section 14

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## 1. Policy Specifications

WILLIAM PENN \$100,000 INSURED SPECIFIED AMOUNT (INCLUDES POLICY VALUE) APRIL 1, 2008 POLICY DATE POLICY NUMBER STANDARD NONTOBACCO RATE CLASS AGE

LIFE INSURANCE QUALIFICATION TEST IS GUIDELINE PREMIUM TEST

MATURITY DATE IS APRIL 1, 2094 DATE OF ISSUE IS THE POLICY DATE

OWNER AND BENEFICIARY AS PROVIDED IN APPLICATION

Schedule of Benefits

Description

Amount

FLEXIBLE PREMIUM ADJUSTABLE LIFE INSURANCE POLICY \$100,000 SPECIFIED AMOUNT OVERLOAN PROTECTION BENEFIT AGREEMENT

THE OVERLOAN PROTECTION BENEFIT AGREEMENT SPECIFIED LOAN PERCENTAGE IS 96%

Schedule of Planned Premiums

THE INITIAL PREMIUM OF \$1,171.51 WAS PAID ON THE POLICY DATE FOR 12 MONTHS. SUBSEQUENT PLANNED PREMIUMS ARE PAYABLE ANNUALLY AS FOLLOWS:

BEGINNING AS OF MAPRIL 1, 2009

PLANNED PREMIUM \$1,171.51

THE NO LAPSE DATE IS APRIL 1, 2094

NOTE: INSURANCE WILL TERMINATE IF THE PREMIUMS PAID AND THE INTEREST CREDITED ARE INSUFFICIENT TO COVER THE MONTHLY DEDUCTIONS, EXCEPT AS PROVIDED IN SECTION 4.

SECTION 7702A OF THE INTERNAL REVENUE CODE OF 1986 ESTABLISHES A CLASS OF LIFE INSURANCE CONTRACTS DESIGNATED AS "MODIFIED ENDOWMENT CONTRACTS." THE RULES RELATING TO WHETHER A POLICY WILL BE TREATED AS A MODIFIED ENDOWMENT CONTRACT ARE EXTREMELY COMPLEX. PLEASE CONSULT WITH A QUALIFIED TAX ADVISOR REGARDING YOUR OWN PERSONAL SITUATION.

## 1. Policy Specifications

#### Schedule of Surrender Charges

Maximum Surrender Charge Premium

Initial Maximum Surrender Charge

Table of Surrender Charge Factors

Policy Year	Surrender Factor	Policy Year	Surrender Factor
1	100%	9	41%
2	90	10	34
3	83	11	27
4	76	12	20
5	69	13	13
1 6	62	14	6
7	55	15 and later	0
1 8	48		
<u> </u>			

#### Schedule of Policy Loads and Expense Charges

Maximum percent of premium load (applied to each premium applied to the policy)

Maximum per policy monthly expense charge

Maximum Monthly Expense charge per \$1,000 of Specified Amount (for the first 120 months following the policy date)

Maximum Monthly Expense charge per \$1,000 of Specified Amount (for the first 120 months following an increase in Specified Amount)

One time charge for the Overloan Protection Benefit Agreement

\$0.310

As shown on Page 21

15%

\$9.00

7 3 5%

#### **Schedule of Interest Rates**

Guaranteed Interest Rate 3% Effective Annual Rate

Death Benefit Discount Factor 1.0024663

## 2. Endorsements

To be made only by the Company

This page is intentionally left blank.

#### 3. Qualification as Life Insurance

The life insurance qualification test for this policy will be the Guideline Premium Test unless otherwise elected in the application. The Life Insurance Qualification Test for this Policy is shown on Page 3. The test may not be changed at anytime after the policy is issued.

The Company will limit premium payments as necessary in order to qualify the policy as a life insurance contract under Section 7702. This contract may be unilaterally amended or modified to satisfy applicable law. The owner shall be permitted to refuse any such change unless noncompliance violates state or federal law. No payment will be returned or refused if it is necessary to continue coverage.

**Guideline Premium Test** - Under this test, the amount of premium that can be paid in a policy year may not exceed the Maximum Premium Limit. The Maximum Premium Limit for a policy year is the largest amount of premium which can be paid in that policy year such that the sum of the premiums paid under the policy will not at any time exceed the guideline premium limitation referred to in Section 7702 of the Internal Revenue Code of 1986, as amended, or as set forth in any applicable successor thereto. The Maximum Premium Limit for the following policy year will be shown on the Annual Report sent to the Owner.

In addition, a minimum margin must exist between the death benefit and the Policy Value. The margin is defined in Section 7702 and is based on the attained age of the Insured. The Basic Death Benefit of the policy will be adjusted accordingly with factors shown in the Table of Death Benefit Factors to satisfy the requirements of this portion of the test. See the Death Benefit Section for further details.

**Cash Value Accumulation Test** - Under this test, the Policy Value cannot at any time exceed the net single premium required to fund the future benefits under the policy. The net single premium is defined in Section 7702 of the Internal Revenue Code. The Basic Death Benefit of the policy will be adjusted accordingly with factors shown in the Table of Death Benefit Factors to satisfy the requirements of this test. See the Death Benefit Section for further details.

The Company reserves the right to restrict Policy transactions as necessary in order to qualify the policy as a life insurance contract under Section 7702. If it is subsequently determined that policy does not satisfy Section 7702, the Company may take whatever steps are appropriate and necessary to attempt to cause such a policy to comply with Section 7702.

#### 4. Premiums

**Payment of Premiums -** Premiums are payable while this policy is in force until the Maturity Date. The first premium is due on the Policy Date. Premiums after the Policy Date may be paid in any amount and at any interval subject to the following conditions:

- (1) No premium payment may be less than \$25.
- (2) The Company requires submission of evidence of insurability on subsequent premiums that cause an immediate increase in the difference between the Death Benefit and the Policy Value. The increase in the difference between the Death Benefit and the Policy Value will be incontestable with respect to statements made in the evidence of insurability for that increase after the increase has been in force during the life of the Insured for two years from its effective date. Any application for such increase will be attached to and made a part of the policy.
- (3) If the Guideline Premium Test is in effect, total premiums paid in any policy year may not exceed the Maximum Premium Limit for that policy year. If excessive premium is paid the Company will refund only the portion that is over the Maximum Premium Limit. No payment will be returned or refused if it is necessary to continue coverage.

## 4. Premiums (continued)

Each premium after the first is payable at the Company's Home Office. A receipt signed by the President or the Secretary will be given on request.

**No-Lapse Guarantee** – This policy will not lapse as a result of a Net Cash Surrender Value insufficient to cover the Monthly Deduction for the following month if, on a monthly anniversary prior to the Maturity Date shown on Page 3, the No-Lapse Guarantee Requirement is satisfied.

**No-Lapse Guarantee Requirement** – The No-Lapse Guarantee Requirement is satisfied if, on a monthly anniversary prior to the Maturity Date shown on Page 3, the No-Lapse Guarantee Account less any outstanding indebtedness exceeds zero.

The No-Lapse Guarantee Requirement is not satisfied if the indebtedness is greater than the Cash Surrender Value.

Note that the No-Lapse Guarantee Account, the No-Lapse Percent of Premium Charge, the No-Lapse COI Charges, and the No-Lapse Interest Rates are not used to determine values and benefits under the policy. These values are only used to determine whether or not the No-Lapse Guarantee Requirement is satisfied.

The Company reserves the right to determine that the No-Lapse Guarantee Requirement has not been satisfied if at any time after a change of Owner or Beneficiary, the Company concludes that the new Owner or new Beneficiary would not have had an insurable interest in the Insured at the time the policy was issued. In addition, the Company reserves the right to determine that the No-Lapse Guarantee Requirement has not been satisfied if at any time, a new Owner or new Beneficiary has obtained the policy ownership and/or policy beneficiary designation with the intent to transfer ownership or any other benefits under the policy to a third party that does not possess an insurable interest in the Insured.

**No-Lapse Guarantee Account** –On the Policy Date, the No-Lapse Guarantee Account is the initial premium paid less the sum of:

- (a) the applicable No-Lapse Percent of Premium Charge shown in the Additional Policy Specifications; and
- (b) the applicable No-Lapse COI Charge for Base Coverage; and
- (c) the applicable No-Lapse COI Charge for each Additional Insured Rider.

On each Monthly Anniversary while this agreement is in force, the No-Lapse Guarantee Account is the sum of:

- (a) the No-Lapse Guarantee Account on the preceding Monthly Anniversary:
- (b) one month's interest on (a) using the applicable No-Lapse Interest Rate shown in the Additional Policy Specifications;
- (c) any premium paid since the preceding Monthly Anniversary reduced by the applicable No-Lapse Percent of Premium Charge; and
- (d) interest on (c) using the applicable No-Lapse Interest Rates from the date of receipt in the Home Office to the Monthly Anniversary;

less the sum of:

- (a) any partial surrender since the preceding Monthly Anniversary;
- (b) interest on (a) using the applicable No-Lapse Interest Rates from the date of surrender to the Monthly Anniversary;
- (c) the applicable No-Lapse COI Charge for Base Coverage; and
- (d) the applicable No-Lapse COI Charge for each Additional Insured Rider.

**No-Lapse Interest Rate** – The No-Lapse Interest Rate applied to the No-Lapse Guarantee Account is tiered based on the amount of the No-Lapse Guarantee Account as shown in the Additional Policy Specifications. The tiers are set at issue for the first policy year and then increase each policy year by the No-Lapse Tier Growth Percentage shown in the Additional Policy Specifications.

## 4. Premiums (continued)

**No-Lapse COI Charge** – The No-Lapse COI Charge is determined on a monthly basis. For Base Coverage, it is calculated as (a) multiplied by (b) where:

- (a) is the applicable No-Lapse COI Rate shown in the Additional Policy Specifications; and
- (b) is the No-Lapse Net Amount at Risk.

For each Additional Insured Rider, it is calculated as (a) multiplied by (b) where:

- (a) is the applicable No-Lapse COI Rate for the Additional Insured Coverage shown in the Additional Policy Specifications; and
- (b) is the Specified Amount of the Additional Insured Coverage, as shown on Page 3.

No-Lapse Net Amount at Risk - The No-Lapse Net Amount at Risk is equal to (a) minus (b) where:

- (a) is the Specified Amount at the beginning of the policy month, divided by the Death Benefit Discount Factor shown on Page 3; and
- (b) is the No-Lapse Guarantee Account at the beginning of the policy month before the deduction of No-Lapse COI Charges.

Changes in the Specified Amount, the addition, deletion or change of any supplemental agreements to this policy, or a change in the rate class of the Insured before the No-Lapse Date may impact the amount of the No-Lapse Guarantee Account. As a result, additional premiums may be required on the date of change in order to meet the No-Lapse Guarantee Requirement.

Continuation of Insurance - If premium payments cease or if insufficient premiums are paid, the insurance provided under this policy, including benefits provided by any supplemental agreements attached to this policy, will continue, subject to the Grace Period provision, in accordance with the provisions of this policy and any such supplemental agreements for as long as the Net Cash Surrender Value is sufficient to keep it in force, or if the No-Lapse Guarantee Account less any outstanding indebtedness exceeds zero as described in the No-Lapse Guarantee Requirement provision above.

Grace Period - If, on a Monthly Anniversary prior to the Maturity Date shown on Page 3:

- (a) the Net Cash Surrender Value is insufficient to cover the Monthly Deduction for the following policy month; and
- (b) the No-Lapse Guarantee Requirement is not met,

then a grace period of 61 days will be allowed for the payment of premium sufficient to keep this policy in force. The payment required is the lesser of the Monthly Deduction or the amount necessary to meet the No-Lapse Guarantee Requirement.

Notice of the amount of premium sufficient to keep this policy in force will be sent to the last known address of the Owner. The notice will be sent at least 30 days before the end of the 61-day grace period. This policy will remain in force during the grace period.

## 5. Lapse and Reinstatement

**Lapse** - If a premium sufficient to keep this policy in force is not paid during the grace period, this policy will lapse at the end of the grace period. At lapse this policy will terminate without value and cease to be in force. Any deduction for the Cost of Insurance after termination will not be considered a reinstatement of the policy nor a waiver by the Company of the termination.

## 5. Lapse and Reinstatement (continued)

Reinstatement - This policy may be reinstated within five years after lapse. A reinstatement is subject to:

- (a) the submission of evidence of insurability satisfactory to the Company;
- (b) the payment or reinstatement of any indebtedness which existed at the end of the grace period; and
- (c) the payment of a premium sufficient to cover the lesser of: (i) the amount necessary to meet the No-Lapse Guarantee Requirement at the date of reinstatement and for three policy months following the reinstatement date, or (ii) an amount to make the Cash Surrender Value positive plus the monthly deductions for the three policy months following the reinstatement date.

The effective date of a reinstatement will be the date of approval by the Company of the application for reinstatement. Such application will be attached to and made a part of the reinstated policy. Following reinstatement, the Policy Date continues to be the date shown on Page 3.

The policy value on the date of reinstatement is the sum of:

- (a) the policy value at the beginning of the grace period of lapse, including any indebtedness;
- (b) interest on (a) at the minimum interest rate per year until the date of reinstatement;
- (c) any dividend credited to the policy;
- (d) interest on (c) at the minimum interest rate until the date of reinstatement; and
- (e) the payment made upon reinstatement reduced by the percent of premium charge

less the sum of:

- (a) the Monthly Deductions for the grace period;
- (b) interest on (a) at the minimum interest rate per year until the date of reinstatement; and
- (c) the Monthly Deduction for the policy month following the date of reinstatement.

The surrender charge set forth in the Surrender of Policy Section will continue to apply to any surrender of this policy following reinstatement. The surrender charge will be calculated based on the policy date and will include the period while the policy was lapsed.

Following reinstatement, the provisions of the No-Lapse Guarantee set forth in Section 4 will again be applicable until the Maturity Date shown on Page 3.

#### 6. Policy Loans

The Owner may obtain a loan while this policy is in force during the life of the Insured. The loan, plus any existing indebtedness, may not be greater than the Loan Value of this policy on the date of the loan.

The Company may defer making a loan for up to six months from the date of the loan request. However, a loan to pay a premium due on a policy issued by the Company will not be deferred.

**Loan Value** - The Loan Value is that amount which, with interest at the then current loan interest rate on this policy, will accumulate at the next policy anniversary to (a) less (b), where:

- (a) is the Cash Surrender Value on the date as of which the Loan Value is being determined; and
- (b) is the Monthly Deductions for the period from the date as of which the Loan Value is being determined until the next policy anniversary.

## 6. Policy Loans (continued)

**Loan Interest** - Loans will bear interest at an adjustable loan interest rate. The loan interest rate will be determined by the Company as of the first day of each calendar year. Such rate will be effective on the date as of which it is determined and will apply to any new or outstanding loan under this policy during the next calendar year.

The loan interest rate will be determined by comparing the loan interest rate in effect for the preceding calendar year with a maximum interest rate defined by law and described below. Any change in the loan interest rate will be subject to the following:

- (1) The loan interest rate will be lowered to be equal to or less than the legal maximum interest rate if such legal maximum interest rate is 1/2% or more lower than the loan interest rate in effect during the preceding calendar year.
- (2) The loan interest rate may be increased, by at least 1/2% but not higher than the legal maximum interest rate, if the legal maximum interest rate is 1/2% or more higher than the loan interest rate in effect during the preceding calendar year.

The legal maximum interest rate used in determining the loan interest rate is the greater of:

- (a) Moody's Corporate Bond Yield Average—Monthly Average Corporates as published by Moody's Investors Service, Inc. for the calendar month ending two months prior to the date as of which the loan interest rate is determined; or
- (b) the minimum interest rate used to calculate policy values under this policy plus 1 percentage point per year.

If Moody's Corporate Bond Yield Average - Monthly Average Corporates is no longer published, the rate used in its place will be as established by law or by regulation of the insurance supervisory official of the jurisdiction in which this policy is delivered.

The Company will:

- (a) notify the Owner of the initial loan interest rate at the time that a loan is made; and
- (b) if there is a loan outstanding on this policy, give the Owner advance notice of any increase in the loan interest rate.

Loan interest is due and payable at the end of each policy year. If the interest is not paid when due, it will be added to the loan. It will then bear interest at the rate of interest on loans.

**Indebtedness** - Indebtedness means outstanding loans on this policy plus any loan interest due or accrued. Indebtedness may be repaid in full or in part at any time while this policy is in force during the life of the Insured. This policy is the only security for indebtedness on it. If the indebtedness is greater than the Cash Surrender Value, a notice of pending termination will be mailed to the last known address of the Owner and of any assignee on record. If the excess indebtedness is not paid to the Company, this policy will terminate 61 days after the notice is mailed.

This policy will not terminate in a policy year as the sole result of a change in the rate of interest on loans until the time at which it would otherwise have terminated if there had been no change in the rate of interest on loans during that policy year.

#### 7. Owner and Beneficiary

**Owner -** The Owner of this policy is as stated in the application unless changed by a subsequent owner designation or assignment. While this policy is in force before the death of the Insured, the Owner may exercise all of the rights in it without the consent of any other person.

**Beneficiary** - The Beneficiary of this policy is as stated in the application unless changed by a subsequent beneficiary designation on a form provided by the Company. If no other provision is made, the interest of a Beneficiary who dies before the death of the Insured will pass to the Owner.

## 7. Owner and Beneficiary (continued)

**Change of Owner or Beneficiary -** The Owner may transfer ownership or change the Beneficiary by filing a written designation at the Home Office on a form provided by the Company. The designation will take effect as of the date it is signed by the Owner, subject to any action taken by the Company prior to the time that the designation is received at the Home Office. As noted above in Section 4, changes of Owner or Beneficiary may adversely impact the No-Lapse Guarantee.

Unless otherwise stated in a designation, the following rules will apply to terms of kinship:

- (a) A legally adopted child of any person will be considered the child of the adopting parent.
- (b) The brothers and sisters of a person will include those who have only one parent in common with the person, but will not include stepbrothers or stepsisters.
- (c) Any reference to children will not include stepchildren and any reference to parents will not include stepparents.

**Assignment -** The Owner may assign this policy while it is in force during the life of the Insured. The rights of the Owner and of any Beneficiary will be subject to the rights of an assignee under the terms of an assignment. No assignment will bind the Company until the original, or a copy signed by the Owner, on a form provided by the Company, has been filed at the Home Office. The Company is not responsible for the effect or the validity of any assignment.

## 8. Death and Maturity Benefits

Basic Death Benefit - The Basic Death Benefit prior to the Maturity Date will be as follows:

- (1) If the Specified Amount includes the Policy Value, as shown on Page 3, the Basic Death Benefit will be equal to the greater of:
  - (a) the Specified Amount; or
  - (b) the Policy Value multiplied by an attained age factor based on the attained age of the Insured shown in the Table of Death Benefit Factors.
- (2) If the Specified Amount does not include the Policy Value, as shown on Page 3, the Basic Death Benefit will be equal to the greater of:
  - (a) the Specified Amount plus the Policy Value; or
  - (b) the Policy Value multiplied by an attained age factor based on the attained age of the Insured shown in the Table of Death Benefit Factors.

The Basic Death Benefit on the Maturity Date and beyond will be equal to the Net Policy Value, together with interest at the current rate set by the Company, which will not be less than the minimum interest rate, compounded annually, until the death of the insured.

**Amount of Death Benefit** - The Death Benefit payable at the death of the Insured while this policy is in force will be equal to the sum of:

- (a) the Basic Death Benefit on the date of death of the Insured:
- (b) any dividend payable at death of the Insured; and
- (c) any benefit provided by a supplemental agreement attached to this policy and payable because of the death of the Insured:

less the sum of:

- (a) any indebtedness on this policy at the time of the death of the Insured; and
- (b) if the death of the Insured occurs during a grace period, the payment deducted should be the lesser of the Monthly Deductions or the amount needed to meet the No-Lapse Guarantee Requirement.

## 8. Death and Maturity Benefits (continued)

**Suicide Exclusion** - If the Insured dies by suicide, while sane or insane, within two years from the Policy Date, the Death Benefit will be limited to the premiums paid less any indebtedness and any partial surrenders.

If the Insured dies by suicide, while sane or insane, within two years from the effective date of any increase in the Specified Amount, the Death Benefit with respect to that increase will be limited to the Monthly Deductions made for that increase.

Payment of Death Benefit - The Death Benefit will be paid to the Beneficiary in one sum or, if elected, under an income payment option. Settlement shall be made within 60 days after receipt of due proof of death. The Company will require surrender of the policy and proof of the interest of the claimant. The Company will pay interest from the date of death to the date of payment. The interest rate will be determined each year by the Company, but will not be less than the minimum interest rate per year compounded annually, or such higher rate as may be required by law.

**Amount of Maturity Benefit** - The Maturity Benefit payable if the Insured is living on the Maturity Date and if this policy is then in force will be equal to the Net Policy Value on that date.

**Payment of Maturity Benefit -** The Maturity Benefit will be paid to the Owner in one sum or, if elected, under an Income Payment Option.

## 9. Surrender of Policy

**Surrender -** The Owner may surrender this policy for its Net Cash Surrender Value by filing a written request with the Company. The Net Cash Surrender Value may be taken in one sum or it may be left with the Company under an income payment option. This policy will terminate and cease to be in force if it is surrendered for one sum.

If this policy is surrendered within 30 days after a policy anniversary, the Net Cash Surrender Value payable on surrender will not be less than the Net Cash Surrender Value on that policy anniversary less any policy loans and partial surrenders made since the anniversary.

The Company may defer the payment of the Net Cash Surrender Value in one sum for up to six months from the date of the surrender request. If the payment is deferred for 30 days or more, it will bear interest at the minimum interest rate per year compounded annually while it is deferred.

Net Cash Surrender Value - The Net Cash Surrender Value is the Net Policy Value decreased by any surrender charge.

Net Policy Value - The Net Policy Value is the Policy Value decreased by any indebtedness on this policy.

Cash Surrender Value - The Cash Surrender Value is the Policy Value decreased by any surrender charge.

**Surrender Charge** - The surrender charge for the initial Specified Amount is determined by multiplying (a) times (b), where:

- (a) is the appropriate surrender factor from the Table of Surrender Factors determined from the Policy Date; and
- (b) is 90% of the lesser of:
  - (i) the maximum surrender charge premium shown on Page 3;
  - (ii) the total premiums paid in the first policy year; and
  - (iii) \$25.00 per thousand of initial Specified Amount.

## 9. Surrender of Policy (continued)

The surrender charge for each increase in Specified Amount is based on the amount of the increase and on the attained age of the Insured at the time of the increase. All premiums paid during the first policy year after the effective date of an increase are applied to the increase in Specified Amount for the calculation of the surrender charge. The surrender charge is determined by multiplying (a) times (b), where:

- (a) is the appropriate surrender factor from the Table of Surrender Factors determined from the Policy Date; and
- (b) is 90% of the lesser of:
  - (i) the maximum surrender charge premium based on the attained age, sex, and class of the Insured at the effective date of the increase;
  - (ii) the total premium paid with the increase for 12 policy months after the effective date of the increase; and
  - (iii) \$25.00 per thousand of the increase amount.

**Partial Surrender** - The Owner may make a partial surrender of this policy for any portion of the Net Cash Surrender Value that exceeds \$250 by filing a written request with the Company. However, no partial surrender may be made for less than \$250 and no more than twelve partial surrenders may be made under this policy in any policy year. No partial surrender may be made which would reduce the Specified Amount to less than \$50,000. A processing fee of 2% of the amount surrendered, but not more than \$25 will be made for each partial surrender. The processing fee will be deducted from the available Net Cash Surrender Value and will be considered part of the partial surrender.

Any partial surrender will reduce the Policy Value by the amount of the partial surrender. If the Specified Amount includes the Policy Value, the Specified Amount will also be reduced by the amount of the partial surrender that exceeds the difference between the Death Benefit and the Specified Amount. In those instances, the Specified Amount will be reduced in the following order:

- (a) The most recent increase in Specified Amount, if any, will be decreased first.
- (b) The next most recent increases in Specified Amount, if any, will then be successively decreased.
- (c) The initial Specified Amount will then be decreased.

The Surrender Charge will not be reduced as a result of a partial surrender.

The Company may defer the payment of the amount of a partial surrender for up to six months from the date of the partial surrender request. However, a partial surrender to pay a premium due on a policy of the Company will not be deferred. If the payment is deferred for 30 days or more, it will bear interest at the minimum interest rate per year compounded annually while it is deferred.

Systematic Partial Surrender Program – The Systematic Partial Surrender Program is a program of periodic distribution of a portion of the Policy Value designated by the Company. The Company reserves the right to discontinue such a program at any time. The program includes periodic distribution to the Owner of a portion of the Policy Value through policy loans and partial surrenders while the Insured is alive and the policy is in force. Contact the Company for details of how this program works. A processing fee of 2% of the amount surrendered, but not more than \$25, will be made for each year the Systematic Partial Surrender Program is active.

## 10. Basis of Computation of Values

Policy Value - On the Policy Date the Policy Value is the initial premium paid less the sum of:

- (a) the percent of premium charge, and
- (b) the Monthly Deduction for the first policy month.

## 10. Basis of Computation of Values (continued)

On each Monthly Anniversary while this policy is in force, the Policy Value is the sum of:

- (a) the Policy Value on the preceding Monthly Anniversary;
- (b) one month's interest on (a);
- (c) any premium paid since the preceding Monthly Anniversary reduced by the percent of premium charge;
- (d) interest on (c) from the date of receipt in the Home Office to the Monthly Anniversary; and
- (e) any dividend credited to the Policy Value on the Monthly Anniversary;

#### less the sum of:

- (f) any partial surrender since the preceding Monthly Anniversary;
- (g) interest on (f) from the date of surrender to the Monthly Anniversary; and
- (h) the Monthly Deduction for the following policy month.

On any date other than a Monthly Anniversary, the determination of the Policy Value will be consistent with the above, except (h), which will only be deducted on a Monthly Anniversary. The value will include pro-rata crediting of interest. There will be no pro-rata debiting of mortality charges.

#### Monthly Deduction - The Monthly Deduction is the sum of:

- (a) the Cost of Insurance for the policy month;
- (b) the monthly per policy expense charge;
- (c) the monthly expense charge per \$1,000 of Specified Amount;
- (d) the Monthly Deduction for the policy month for any benefits provided by a supplemental agreement made a part of this policy.

**Net Amount at Risk** - The Net Amount at Risk is equal to the Basic Death Benefit at the beginning of the policy month, divided by the Death Benefit Discount Factor, minus the Policy Value at the beginning of the policy month before the Monthly Deduction.

If the Specified Amount does not include the Policy Value, the Policy Value will be allocated to the initial Specified Amount segment in order to determine the Net Amount at Risk.

If there have been any increases in the Specified Amount, the Policy Value will be allocated to the initial Specified Amount segment for determining the Net Amount at Risk. If the Policy Value exceeds the initial Specified Amount, the excess will be allocated to the increases in Specified Amount in the order of the increases. Any increases in the Basic Death Benefit in order to maintain the required minimum margin between the Basic Death Benefit and the Policy Value will be allocated to the most recent increase in Specified Amount.

**Cost of Insurance** - The Cost of Insurance is determined on a monthly basis. It is determined separately for the initial segment as well as for each additional segment created as the result of an increase in the Specified Amount. The total Cost of Insurance for a policy month is calculated as the sum of (a) multiplied by (b) for each segment where:

- (a) is the applicable Cost of Insurance Rate divided by 1,000;
- (b) is the Net Amount at Risk for that segment.

Cost of Insurance Rate - The Cost of Insurance Rate is based on policy year and on the issue age, sex and rate class of the Insured. The Cost of Insurance Rate for any increase in Specified Amount will be based on the policy duration since the effective date of the increase and on the attained age, sex, and rate class of the Insured on the effective date of the increase.

The Cost of Insurance Rate will be determined by the Company as described in the Determination of Nonguaranteed Factors provision. However, these rates will not exceed those shown in the Additional Policy Specifications. Such maximum rates are based on the 2001 Commissioners Standard Ordinary Smoker and Nonsmoker Mortality Table, Age Nearest Birthday.

#### 10. Basis of Computation of Values (continued)

**Interest Rate** - The minimum interest rate that will be used in calculating the Policy Value under this policy is listed on Page 3.

The actual interest that will be credited to the Policy Value will be at rates set by the Company. Different rates will normally apply to (i) the Net Policy Value and (ii) the portion of the Policy Value represented by indebtedness.

Such rates will not be less than the minimum rate stated above.

The portion of the Net Policy Value that results from premiums paid during a specific calendar month will be credited with interest at the rate set by the Company for premium payments in that month. This credited rate will apply to the portion of the Net Policy Value until the end of the same calendar month in the following year. At the end of such period, that portion of the Net Policy Value will be credited at a new rate set by the Company that will be applicable for the next thirteen months. This procedure will recur at the end of each interest period.

If the Company credits interest at a rate in excess of the minimum interest rate, policies that have been in force for more than 10 years will be credited with interest at a rate that is greater than the rate credited to policies that have been in force less than 10 years. The difference will be equal to the monthly equivalent of 0.25% per year compounded annually. Such difference will not be applicable to that portion of the Policy Value represented by indebtedness.

**Expense Charges -** The actual monthly per policy expense charge, monthly expense charge per \$1,000 of Specified Amount, and percent of premium charge will be determined by the Company as described in the Determination of Nonguaranteed Factors provision. However, these actual expense charges will not exceed the maximum expense charges stated on Page 3.

The per \$1,000 of Specified Amount expense charge on the initial Specified Amount will be eliminated for policies that have been in force over ten policy years. The elimination of the per \$1,000 of Specified Amount expense charge is due to the fact that the amortization of acquisition expenses is completed by the end of the tenth policy year.

The per \$1,000 of Specified Amount expense charge for any increases in Specified Amount will be eliminated after the charge has been assessed for 10 years from the date of the increase. This charge is also due to the amortization acquisition expense for that increase being completed by the end of the tenth year.

**Determination of Nonguaranteed Factors -** Cost of Insurance Rates, Expense Charges, and Interest Rates will be determined by the Company based on expectations as to future mortality, investment, expense, and persistency experience. The Company will not adjust such rates or charges as a means of recovering prior losses or as a means of distributing prior profits.

**Computation of Values -** All policy values and benefits are equal to or greater than those required by the law of the jurisdiction in which this policy is delivered. A detailed statement of the method of computing reserves and Policy Values has been filed with the insurance supervisory official of that jurisdiction if required.

## 11. Policy Changes

**Right to Make Change** - At any time while this policy is in force after the first policy year, the Owner may request changes as set forth in this section. No change will be permitted that would result in the Death Benefit under this policy not being excludable from gross income due to not satisfying the requirements of Section 7702 of the Internal Revenue Code of 1986, as amended, or as set forth in any applicable successor provision thereto. In addition, each change is subject to the conditions stated. This policy will be amended as the result of any such change.

**Increase in Specified Amount** - An increase in Specified Amount must be applied for on a written application and is subject to the Company's underwriting guidelines in effect at the time of the increase. Evidence of insurability satisfactory to the Company must be submitted. Any increase in the Specified Amount must be for at least \$10,000.

## 11. Policy Changes (continued)

**Decrease in Specified Amount -** Any decrease in the Specified Amount must be at least \$10,000. The Specified Amount may not be decreased to less than \$50,000. No decrease in the Specified Amount may be made in the first policy year. No decrease may be made in the first year following the effective date of an increase in the Specified Amount.

Any decrease in the Specified Amount will become effective on the Monthly Anniversary that coincides with or next follows the receipt by the Company of the request. The decrease in the Specified Amount will be in the following order:

- (a) The most recent increase in the Specified Amount, if any, will be decreased first.
- (b) The next most recent increases in the Specified Amount, if any, will then be successively decreased.
- (c) The initial Specified Amount will then be decreased.

The surrender charge will not change as a result of a decrease in the Specified Amount. No surrender charge will be deducted from the Policy Value upon a decrease in the Specified Amount. The monthly expense charge per \$1000 of Specified Amount will not change as a result of a decrease in the Specified Amount.

Change in Specified Amount Option - If the Specified Amount does not include the Policy Value, a request may be made to change this policy so that the Specified Amount includes the Policy Value. The Specified Amount after the change will be equal to the Specified Amount before the change plus the Policy Value on the date of the change. The effective date of the change will be the Monthly Anniversary that coincides with or next follows the date of receipt by the Company of the request to make the change.

If the Specified Amount includes the Policy Value, a request may be made to change this policy so that the Specified Amount does not include the Policy Value. The Specified Amount after the change will be equal to the Specified Amount before the change less the Policy Value on the date of the change. Any application for such increase will be attached to and made a part of the policy. The effective date of the change will be the Monthly Anniversary that coincides with or next follows the date of receipt by the Company of the request to make the change.

The Specified Amount after the change must be at least \$50,000. No more than one change in the Specified Amount option may be made in any policy year.

#### 12. General Provisions

**The Contract** - This policy, all applications and any supplemental agreements or amendments constitute the entire contract when attached to the policy. Only the President, a Vice President, the Secretary, the Chief Actuary, an Actuary or an Associate Actuary may, on behalf of the Company, modify this policy or waive any of its conditions. No agent is authorized to modify this contract or to make any promise as to the future payment of dividends or interest.

At any time the Company may make such changes in this policy as are necessary (i) to assure compliance at all times with the definition of life insurance prescribed by federal income tax law, or (ii) to make the policy conform with any law or regulation issued by any government agency to which it is subject. This contract may be unilaterally amended or modified to satisfy applicable law. The owner shall be permitted to refuse any such change unless noncompliance violates state or federal law.

**Incontestability** - All statements made in any application for this policy are representations and not warranties. No statement will void this policy or be used to contest a claim under it unless the statement is contained in a written application, a copy of which is attached to and made a part of this policy.

## 12. General Provisions (continued)

This policy will be incontestable after it has been in force during the life of the Insured for two years from the Policy Date. Any increase in the Specified Amount will be incontestable with respect to statements made in the evidence of insurability for that increase after the increase has been in force during the life of the Insured for two years from its effective date.

This policy will be incontestable with respect to statements made in an application for reinstatement after it has been in force during the life of the Insured for two years from the effective date of the reinstatement.

**Duration of Coverage** - The duration of coverage under this policy will depend on the amount, timing and frequency of premium payments; changes in the Specified Amount or benefits; the interest rates credited or investment return; the cost of insurance rates charged; percent of premium charge; expense charges; surrenders, and the amount and timing of any partial surrenders or policy loans.

**Participation -** This policy will participate in divisible surplus while it is in force except as stated in the Income Payment Options section. The share of such surplus, if any, to be apportioned to this policy as a dividend will be determined each year by the Company.

Any dividend will be credited to the Policy Value, unless the Owner elects to have it paid in cash.

**Policy Date** - The Policy Date shown on Page 3 is the date from which policy years, months and anniversaries are determined.

**Monthly Anniversary** - The Monthly Anniversary is the day in each calendar month that is the same day of the month as the Policy Date.

**Age -** The age shown on Page 3 is the insurance age of the Insured. This is the age of the Insured on the birthday nearest the Policy Date. Attained age means the insurance age of the Insured increased by the number of whole years and months after the Policy Date.

**Misstatement of Age or Sex** - If the age or the sex of the Insured has been misstated, the Death Benefit under this policy will be the amount which would have been provided by the most recent Cost of Insurance charge at the correct age and sex. No adjustment in the Policy Value will be made. Any date shown on Page 3 that is based on an incorrect age may be changed to be consistent with the correct age.

**Policy Payments** - All payments by the Company under this policy are payable at the Home Office. The Company may require the return of this policy upon surrender for the Net Cash Surrender Value or payment of the Death Benefit.

**Annual Report -** Each year a report will be sent to the Owner which shows the current policy values, premiums paid and deductions made since the last report, any outstanding policy loans, and any other information required by the Insurance Department of the jurisdiction in which this policy is delivered.

**Projection of Benefits and Values -** Upon request, the Company will provide a projection of illustrative future Death Benefits and Policy Values. The request for a projection must be made in writing by the Owner. The Company may charge a fee for this service.

**Deferral of Maturity** - Upon the written request of the Owner, this policy will continue in force beyond the Maturity Date. The Death Benefit will be the Net Policy Value on the Maturity Date together with interest at the current rate set by the Company, which will be not less than the minimum interest rate compounded annually, until the death of the Insured.

## 13. Income Payment Options

**Election of Income Payment Option**—An income payment option may be elected in place of a one sum payment of any amount payable upon the death of the Insured or upon surrender.

The Owner may elect an income payment option or change a previous election while this policy is in force before the death of the Insured. If no election is in effect at the time of the death of the Insured, the Beneficiary may elect an income payment option before any payment of the Death Benefit has been made and within one year of the date of death.

The amount applied under an income payment option must be at least \$5,000. No election may provide for income payments of less than \$50 each.

**Option 1—Interest Income**—The Company will hold the amount applied at interest. Interest will be paid monthly, quarterly, semiannually or annually.

**Option 2— Income for a Fixed Period—**The Company will pay the amount applied, with interest, in equal monthly payments for a fixed period. The fixed period may not be greater than 30 years.

**Option 3— Income of a Specified Amount**—The Company will make payments of a specified amount until the total amount applied, with interest, has been paid. The payments may be made monthly, quarterly, semiannually or annually. The final payment may be less than the specified amount. The total of the payments to be made each year must be at least \$75 for each \$1,000 applied.

Option 4— Life Income—The Company will pay equal monthly payments during the life of the option annuitant.

**Option 5— Life Income with Guaranteed Period**—The Company will pay equal monthly payments for a stated guaranteed period and thereafter during the life of the option annuitant. The guaranteed period may be 5 years, 10 years or 20 years.

**Option 6— Life Income with Refund Period**—The Company will pay equal monthly payments during the life of the option annuitant. If necessary, the payments will continue after the death of the option annuitant until the total of all payments made, including a smaller final payment, if required, equals the total amount applied.

**Option 7— Joint and Survivor Life Income—**The Company will pay equal monthly payments during the joint life of two option annuitants and thereafter during the life of the survivor.

**Income Amount—Participation—**The income under Options 1 and 2 will be based on interest at a rate of 1.5% per year compounded annually. The unpaid balance of the amount applied under Option 3 will be credited with interest at a rate of 1.5% per year compounded annually.

Options 1, 2 and 3 will participate in divisible surplus by the payment or crediting of additional interest in such amount, if any, as determined each year by the Company. Additional interest will increase the income payments under Options 1 and 2. Additional interest will lengthen the period during which payments are made under Option 3.

The monthly income under Options 4, 5, 6 and 7 will equal 103% of the monthly income under a comparable single premium nonparticipating annuity issued by the Company at the time that the income payments are to begin. In no event will the monthly income under these life income options be less than the income stated in the Income Payment Option Tables. Options 4, 5, 6 and 7 will not participate in divisible surplus.

**Income Period**—The income period under an option will begin on the date of death or surrender. Income payments under Options 1 and 3 will be made at the end of the payment interval. Income payments under Options 2, 4, 5, 6 and 7 will be made at the beginning of the payment interval.

**Option Annuitant**—Option annuitant means a natural person on whose life the income payments under Options 4, 5, 6 and 7 are based.

## 13. Income Payment Options (continued)

The Company may require proof of the age and of the continued life of an option annuitant. If the age or the sex of an option annuitant has been misstated, an appropriate adjustment will be made in the income payments.

Withdrawal Privilege—Unless the election states otherwise, the payee under an income payment option may:

- (a) before any income payment has been made, withdraw the amount applied under the option; or
- (b) withdraw the present value of the income payments to become due during any fixed, guaranteed or refund period; or
- (c) withdraw the balance held under Option 1 or 3 plus any accrued interest.

There will be no right to withdraw the present value of the income payments falling due after the guaranteed or refund period under Options 5 and 6. There will be no right to withdraw the present value of any income payments under Options 4 and 7.

The Company may defer the payment of the amount withdrawn for up to six months from the date of a withdrawal request.

**Present Value**—The present value of the income payments under Option 2 will be based on interest at a rate of 1.5% per year compounded annually. The present value of the remaining income payments during a guaranteed or refund period under a life income option will be based on interest at a rate set by the Company at the time income payments are to begin.

**Death of Payee**—Upon the death of the payee under an income payment option, the Company will pay the following to the payee's executors or administrators unless stated otherwise in an election consented to by the Company:

- (a) the balance of the amount held under Option 1 or 3 plus any accrued interest; or
- (b) the present value of the income payments to become due during the fixed period under Option 2; or
- (c) if the option annuitant under Option 5 or 6 has died, the present value of the income payments, if any, to become due during the guaranteed or refund period; or
- (d) if any option annuitant under Option 4, 5, 6 or 7 is living, any income payments as they become due during the option annuitant's life plus, upon the death of the option annuitant under Option 5 or 6, the present value of the income payments, if any, to become due during the guaranteed or refund period.

**Assignment**— **Creditors**—The amount applied under an income payment option and the payments under the option may not be assigned and, to the extent permitted by law, will not be available to anyone who has a claim against the payee.

## 14. Income Payment Option Table

The following tables show the amount of the first monthly income payment for each \$1,000 of value applied under an annuity option. "Age" as used in the tables for Options 2,3, and 4 means an adjusted age determined in the following manner from the actual age of the Annuitant on the birthday nearest the date of the first payment:

Date of First Payment Before calendar year 2010 2010-2019 2020-2029 2030 and later Adjusted Age Actual Age Actual age decreased by 1 Actual age decreased by 2 Actual age decreased by 3

Option 1-Interest Income

Option 2—Income for Fixed Period of Years

			Monthly		Monthly		Monthly
Payment Interval	Amount	Years	Income	Years	Income	Years	Income
		1	\$83.90	11	\$8.21	21	\$4.62
Annually	\$15.00	2	42.26	12	7.58	22	4.44
		3	28.39	13	7.05	23	4.28
Semiannually	7.47	4	21.45	14	6.59	24	4.13
		5	17.28	15	6.20	25	3.99
Quarterly	3.73	6	14.51	16	5.85	26	3.86
		7	12.53	17	5.55	27	3.75
Monthly	1.24	8	11.04	18	5.27	28	3.64
		9	9.89	19	5.03	29	3.54
		10	8.96	20	4.81	30	3.44

# 14. Income Payment Option Table (continued) Options 4, 5 and 6—Monthly Life Income The amount of income will be based on the age of the option annuitant on the birthday nearest the date of the first payment.

THE diffedit (		ion 4				tion 5			Optic				otion 4			Opt	ion 5		<del></del> ,	Option	6
Age of Option Annui- tant		ife ome	Guar	Year anteed eriod	Guai	Year ranteed eriod	Guar	Year anteed eriod	wit Refu Peri		Age of Option Annui- tant		Life come	Guar	Year anteed eriod	Guar	Year anteed eriod	Guar	Year ranteed eriod	wit Refun Perio	id
15 16 17 18 19			Male \$1.96 1.98 2.00 2.02 2.04	Female \$1.89 1.91 1.92 1.94 1.96				Female \$1.91 1.93 1.94 1.96 1.98		Female \$1.88 1.90 1.91 1.93 1.95	65 66 67 68 69	Male 4.85 5.02 5.20 5.39 5.60	4.51 4.66 4.83	Male F 4.14 4.21 4.27 4.33 4.39	emale 3.96 4.04 4.11 4.18 4.26	Male f 4.69 4.83 4.98 5.13 5.29	emale 4.28 4.41 4.55 4.69 4.84	Male 4.81 4.98 5.15 5.33 5.53	Femal 4.35 4.49 4.64 4.80 4.97		Fema 3.9 4.0
20 21 22 23 24	2.09 2.11 2.13 2.15 2.17	2.01 2.02 2.04 2.06 2.08	2.06 2.08 2.10 2.12 2.14	1.98 1.99 2.01 2.03 2.05	2.07 2.09 2.11 2.13 2.15	1.99 2.00 2.02 2.04 2.06	2.08 2.10 2.12 2.14 2.16	2.00 2.01 2.03 2.05 2.07	2.05 2.07 2.09 2.11 2.13	1.97 1.98 2.00 2.02 2.04	70 71 72 73 74	5.82 6.05 6.30 6.57 6.85	5.19 5.39 5.61 5.85 6.11	4.44 4.49 4.54 4.58 4.62	4.32 4.39 4.45 4.50 4.55	5.45 5.62 5.79 5.96 6.14	5.00 5.17 5.34 5.52 5.71	5.73 5.95 6.17 6.42 6.67	5.15 5.34 5.55 5.78 6.02	4.67 4.75 5.05 5.13 5.34	4.4 4.5 4.8 5.0
25 26 27 28 29	2.20 2.22 2.25 2.27 2.30	2.10 2.13 2.15 2.17 2.19	2.17 2.19 2.22 2.24 2.27	2.07 2.10 2.12 2.14 2.16	2.18 2.20 2.23 2.25 2.28	2.08 2.11 2.13 2.15 2.17	2.19 2.21 2.24 2.26 2.29	2.09 2.12 2.14 2.16 2.18	2.16 2.18 2.21 2.22 2.26	2.06 2.09 2.11 2.13 2.15	75 76 77 78 79	7.15 7.47 7.82 8.19 8.59	6.39 6.69 7.01 7.36 7.74	4.65 4.68 4.71 4.73 4.75	4.60 4.64 4.67 4.70 4.72	6.32 6.51 6.69 6.87 7.05	5.91 6.11 6.31 6.52 6.73	6.94 7.22 7.52 7.83 8.15	6.28 6.55 6.84 7.16 7.49	5.45 5.63 5.81 5.94 6.22	5.1 5.1 5.1 5.7 5.8
30 31 32 33 34	2.33 2.36 2.39 2.42 2.46	2.22 2.24 2.27 2.30 2.33	2.30 2.33 2.36 2.39 2.43	2.19 2.21 2.24 2.27 2.30	2.31 2.34 2.37 2.40 2.44	2.20 2.22 2.25 2.28 2.31	2.32 2.35 2.38 2.41 2.45	2.21 2.23 2.26 2.29 2.32	2.27 2.29 2.35 2.38 2.40	2.18 2.20 2.22 2.26 2.27	80 81 82 83 84	9.01 9.47 9.95 10.47 11.02	8.16 8.60 9.09 9.61 10.18	4.76 4.78 4.79 4.79 4.80	4.75 4.76 4.78 4.79 4.80	7.22 7.39 7.56 7.71 7.86	6.93 7.13 7.33 7.52 7.69	8.49 8.84 9.21 9.58 9.97	7.84 8.21 8.60 9.01 9.44	6.25 6.69 6.77 7.13 7.32	6.( 6.6 6.7 7.1
35 36 37 38 39	2.49 2.53 2.56 2.60 2.65	2.36 2.39 2.42 2.46 2.49	2.46 2.50 2.53 2.57 2.62	2.33 2.36 2.39 2.43 2.46	2.47 2.51 2.54 2.58 2.63	2.34 2.37 2.40 2.44 2.47	2.48 2.52 2.55 2.59 2.64	2.35 2.38 2.41 2.45 2.48	2.44 2.45 2.49 2.50 2.57	2.32 2.35 2.36 2.42 2.45	85 86 87 88 89	12.91 13.61	11.45 12.16	4.81 4.81 4.81 4.81 4.81	4.80 4.81 4.81 4.81 4.81	8.00 8.13 8.24 8.35 8.45	7.86 8.01 8.15 8.27 8.38	10.36 10.76 11.17 11.57 11.97	9.87 10.32 10.77 11.22 11.66	7.45 7.80 7.91 8.47 8.65	7.5 7.5 7.5 8.6 8.4
40 41 42 43 44	2.69 2.73 2.78 2.83 2.88	2.53 2.57 2.61 2.65 2.69	2.66 2.70 2.74 2.79 2.83	2.50 2.54 2.58 2.62 2.66	2.67 2.71 2.76 2.81 2.86	2.51 2.55 2.59 2.63 2.67	2.68 2.72 2.77 2.82 2.87	2.52 2.56 2.60 2.64 2.68	2.60 2.65 2.66 2.72 2.76	2.48 2.52 2.54 2.55 2.61	90 91 92 93 94	16.01	14.55 15.43 16.34 17.29 18.29	4.81 4.81 4.81 4.81 4.81	4.81 4.81 4.81 4.81 4.81	8.54 8.61 8.68 8.74 8.80	8.48 8.56 8.64 8.71 8.76	12.37 12.77 13.15 13.53 13.91	12.09 12.51 12.92 13.31 13.69	8.77 9.60 9.75 9.82 10.90	8.6 9.0 9.4 9.7 10.2
45 46 47 48 49	2.94 2.99 3.05 3.11 3.18	2.74 2.79 2.84 2.89 3.09	2.88 2.93 2.98 3.03 3.09	2.71 2.76 2.80 2.85 2.92	2.92 2.97 3.03 3.09 3.16	2.72 2.77 2.82 2.87 2.92	2.93 2.98 3.04 3.10 3.17	2.73 2.78 2.83 2.88 2.93	2.79 2.80 2.88 2.90 2.97	2.62 2.68 2.70 2.76 2.79	95 96 97 98 99	23.84	19.32 20.42 21.60 22.89 24.35	4.81 4.81 4.81 4.81 4.81	4.81 4.81 4.81 4.81 4.81	8.84 8.88 8.90 8.93 8.94	8.81 8.85 8.89 8.91 8.93	14.28 14.64 14.99 15.34 15.67	14.05 14.41 14.76 15.11 15.45	11.21 11.65 12.14 12.55 13.12	10.5 10.5 11.5 11.7 12.2
50 51 52 53 54	3.24 3.31 3.39 3.47 3.55	3.00 3.06 3.13 3.19 3.26	3.14 3.20 3.26 3.32 3.39	2.95 3.00 3.06 3.12 3.18	3.22 3.29 3.36 3.44 3.51	2.98 3.04 3.11 3.17 3.24	3.23 3.30 3.38 3.46 3.54	2.99 3.05 3.12 3.18 3.25	3.05 3.06 3.16 3.17 3.28	2.85 2.94 2.95 2.99 3.05	100 101 102 103 104		26.01 27.93 30.15 32.76 35.81	4.81 4.81 4.81 4.81 4.81	4.81 4.81 4.81 4.81 4.81	8.95 8.96 8.96 8.96 8.96	8.95 8.96 8.96 8.96 8.96	15.99 16.27 16.53 16.75 16.93	15.79 16.10 16.38 16.64 16.84	13.75 14.43 15.01 15.85 16.79	13.5
55 56 57 58 59	3.63 3.73 3.82 3.92 4.03	3.34 3.41 3.50 3.58 3.68	3.45 3.52 3.58 3.65 3.72	3.24 3.30 3.37 3.44 3.51	3.60 3.68 3.77 3.87 3.97	\$3,32 3,39 3,47 3,56 3,64	3.62 3.72 3.81 3.91 4.02	3.33 3.40 3.49 3.57 3.67	3.29 3.35 3.41 3.49 3.55	3.10 3.17 3.29 3.30 3.43	105 106 107 108 109	51.23 57.34	39.41 43.66 48.69 54.67 61.81	4.81 4.81 4.81 4.81 4.81	4.81 4.81 4.81 4.81 4.81	8.96 8.96 8.96 8.96 8.96	8.96 8.96 8.96 8.96 8.96	17.16 17.22 17.26	17.01 17.13 17.21 17.25 17.27	16.92 17.02 17.08 17.12 17.14	
60 61 62 63 64	4.15 4.27 4.40 4.54 4.69	3.78 3.88 3.99 4.11 4.23	3.79 3.86 3.93 4.00 4.07	3.58 3.65 3.73 3.81 3.88	4.07 4.19 4.30 4.42 4.55	3.74 3.83 3.94 4.05 4.16	4.13 4.25 4.38 4.52 4.66	3.77 3.87 3.98 4.09 4.22	3.64 3.71 3.81 3.88 3.96	3.45 3.51 3.62 3.67 3.80	110	73.20	70.40	4.81	4.81	8.96	8.96	17.28	17.28	17.16	16.1

# 14. Income Payment Option Table (continued)

Option 7—Joint and Survivor Monthly Life Income
The amount of income will be based on the ages of the option annuitants on their respective birthdays nearest the date of the first payment. The table shows income for certain ages for one male and one female option annuitant. The amount is shown under the age of the male and opposite the age of the female. Amounts of income for other combinations of ages or for option annuitants of the same sex will be furnished upon request.

Age of Female		Age of M	ale Option	n Annuitan	t								
Option Annuitant	50	55	60	65	70	75	80	85	90	95	100	105	110
50	\$2.72	\$2.80	\$2.87	\$2.92	\$2,95	\$2.97	\$2.98	\$2.99	\$3,00	\$3.00	\$3.00	\$3.00	\$3.00
55	2.85	2.98	3.09	3.18	3.24	3.28	3.30	3.32	3.33	3.33	3.33	3.34	3.34
60	2.96	3.15	3.32	3.47	3.58	3.66	3.71	3.74	3.75	3.76	3.77	3.77	3.77
65	3.05	3.29	3.54	3.77	3.97	4.12	4.22	4.28	4.32	4.35	4.35	4.36	4.37
70	3.12	3.41	3.73	4.07	4.39	4.66	4.86	5.00	5.08	5.13	5.16	5.18	5.19
75	3.17	3.50	3.89	4.33	4.80	5.25	5.64	5.92	6.12	6.24	6.31	6.36	6.38
80	3.20	3.56	4.00	4.53	5.16	5.83	6.48	7.04	7.46	7.75	7.95	8.07	8.14
85	3.22	3.59	4.06	4.67	5.43	6.31	7.28	8.24	9.06	9.70	10.19	10.54	10.72
90	3.23	3.61	4.10	4.75	5.60	6.65	7.92	9.31	10.68	11.89	12.95	13.82	14.34
95	3.24	3.62	4.12	4.80	5.69	6.86	8.35	10.12	12.03	13.93	15.80	17.56	18.77
100	3.24	3.63	4.14	4.82	5.75	7.00	8.64	10.73	13.20	15.88	18.87	22.12	24.70
105	3.24	3.63	4.14	4.84	5.79	7.09	8.86	11.22	14.23	17.86	22.51	28.80	35 26
110 3.24 3.6	3 4.1	5 4	4.85	5.81	7.13	8.97	11.50	14.	89	19.30	25.93	36.41	52.85

## **Additional Policy Specifications**

Table of Guaranteed Maximum Monthly Expense Charges per \$1,000 of Specified Amount

ISSUE	BASE COVERAGE
AGE	CHARGE
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 55 55 57 58 59 60 61 62 63 64 65 66 66 67 67 72 73 74 75	0.310 0.310 0.311 0.311 0.312 0.312 0.313 0.313 0.314 0.314 0.315 0.315 0.316 0.316 0.317 0.318 0.319 0.320 0.321 0.322 0.321 0.322 0.342 0.344 0.345 0.344 0.345 0.347 0.348 0.355 0.355 0.355 0.355 0.370 0.370 0.373 0.373 0.376 0.385 0.397 0.406 0.417

POLICY NUMBER 0 000 000
FLEXIBLE PREMIUM LIFE INSURANCE POLICY
WILLIAM PENN
AGE 35 MALE NONTOBACCO

Table of Guaranteed Maximum Monthly Expense Charges per \$1,000 of Specified Amount

ISSUE		COVERAGE
AGE	CH	ARGE
	·	,
76	0.	434
77	0.	460
78	0.	510
79	0.	651
80	0.	791
81	0.	932
82	1.	072
83	1.	213
84	1.	353
85	1.	494
(		

TABLE OF GUARANTEED MAXIMUM MONTHLY COST OF INSURANCE RATES PER \$1,000

ATTAINED	BASE COVERAGE
AGE	RATES
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 55 55 55 55 66 67 68 67 70 77 77 76	0.0908 0.0958 0.1000 0.1075 0.1142 0.1217 0.1317 0.1442 0.1584 0.1750 0.1942 0.2125 0.2326 0.2442 0.2576 0.2767 0.2993 0.3301 0.3635 0.4060 0.4585 0.5119 0.5695 0.6187 0.6755 0.7439 0.8274 0.9292 1.0436 1.1639 1.2908 1.4195 1.5499 1.6904 1.8359 2.0124 2.2099 2.4694 2.7433 3.0317 3.36911

POLICY NUMBER 0 000 000
FLEXIBLE PREMIUM LIFE INSURANCE POLICY
WILLIAM PENN
AGE 35 MALE NONTOBACCO

TABLE OF GUARANTEED MAXIMUM MONTHLY COST OF INSURANCE RATES PER \$1,000

ATTAINED AGE	BASE COVERAGE
77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120	4.0908 4.5582 5.0984 5.6880 6.3602 7.0612 7.8181 8.6576 9.5971 10.6404 11.7822 13.0087 14.3059 15.6632 16.9431 18.2807 19.6954 21.1940 22.7729 24.2220 25.7717 27.4307 29.2072 31.1139 32.6320 34.2545 35.9867 37.8360 39.7830 41.8611 44.0793 46.4474 48.9749 51.6712 54.5501 57.6228 60.9057 64.4101 68.1545 72.1551 76.4311 81.0051 83.3333 83.3333 83.3333

POLICY NUMBER 0 000 000
FLEXIBLE PREMIUM LIFE INSURANCE POLICY
WILLIAM PENN
AGE 35 MALE NONTOBACCO

Table of Death Benefit Factors

Attained Age	Factor
0-40	2.500
41	2.430
42	2.360
43	2.290
44	2.220
45	2.150
46	2.090
47	2.030
48	1.970
49	1.910
50	1.850
51	1.780
52	1.710
53	1.640
54	1.570
55	1.500
56	1.460
57	1.420
58	1.380
59	1.340
60	1.300
61	1.280
62	1.260
63	1.240
64	1.220
65	1.200
66	1.190
67	1.180
68	1.170
69	1.160
70	1.150
71	1.130
72	1.110
73	1.090
74	1.070
75-90	1.050
91 92 93 94 95 96-121	1.040 1.030 1.020 1.010 1.010

POLICY NUMBER 0 000 000 FLEXIBLE PREMIUM LIFE INSURANCE POLICY WILLIAM PENN

AGE 35 MALE

NONTOBACCO

TABLE OF NO-LAPSE PERCENT OF PREMIUM CHARGE

POLICY YEAR	PERCENT OF PREMIUM CHARGE	
1	$\lceil 7 \rceil$	
2 3 4 5	7	
3	7	
4	7	
5	7 7	
6	7	
7	7	
8	7	
9	7	
10	7	
11	7	
12	7	
13	7 7	
14	7	
15	7	
16	7	
17	7	
18	7	
19	7	
20	7	
21+	0	

POLICY NUMBER 0 000 000
FLEXIBLE PREMIUM LIFE INSURANCE POLICY
WILLIAM PENN
AGE 35 MALE NONTOBACCO

TABLE OF MONTHLY NO-LAPSE COST OF INSURANCE RATES Per \$1000

POLICY YEAR	RATES
1 2 3 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 33 33 33 33 33 33 33 33 33 33 33 33	0.0863 0.0966 0.1083 0.1213 0.1359 0.1481 0.1615 0.1761 0.1919 0.2093 0.2281 0.2487 0.2712 0.2957 0.3224 0.3483 0.4746 0.5569 0.6073 0.6624 0.7226 0.7226 0.7882 0.8599 0.9382 1.0237 1.1170 1.2191 1.3181 1.4254 1.56673 1.8036 1.9688 2.1516 2.3507 2.5688 2.8078 3.0698 3.3572 3.6727 4.0192

POLICY NUMBER 0 000 000
FLEXIBLE PREMIUM LIFE INSURANCE POLICY
WILLIAM PENN
AGE 35 MALE
NONTOBACCO

TABLE OF MONTHLY NO-LAPSE COST OF INSURANCE RATES Per \$1000

POLICY YEAR	RATES
45 46 47 48 49 50 51 55 55 55 55 55 55 60 61 62 63 64 66 66 67 77 77 77 77 77 77 77 77 77 77	4.4000 4.8190 5.2802 5.7884 6.3490 6.9682 7.6530 8.4113 9.2523 10.1868 11.2272 11.9978 12.8285 13.7250 14.6937 15.7418 16.4962 17.2929 18.1352 19.06261 20.9694 22.0300 23.1560 24.3529 25.6266 26.9836 28.4312 29.9776 31.6318 33.4043 35.3066 47.2973 50.3319 53.6411 57.2611 61.2346 61.2346

POLICY NUMBER 0 000 000
FLEXIBLE PREMIUM LIFE INSURANCE POLICY
WILLIAM PENN
AGE 35 MALE NONTOBACCO

NO-LAPSE TIER GROWTH PERCENTAGE TABLE OF MONTHLY NO-LAPSE INTEREST RATES (ATTAINED AGES 90 AND BELOW) POLICY YEAR 1 **INTEREST** AMOUNT OF NO-LAPSE ACCOUNT BALANCE **RATE** TIER 1: FIRST \$5,000 1.06086% TIER 2: NEXT \$10,000 0.68215% TIER 3: NEXT \$50,000 0.48676% TIER 4: REMAINDER OF NO-LAPSE ACCOUNT BALANCE 0.34344% POLICY YEARS AFTER YEAR 1 INTEREST AMOUNT OF NO-LAPSE ACCOUNT BALANCE RATE TIER 1: FIRST [\$5,000 increased by No-Lapse Tier Growth Percentage each year] 1.06086% TIER 2: NEXT [\$10,000 increased by No-Lapse Tier Growth Percentage each year] 0.68215% TIER 3: NEXT [\$50,000 increased by No-Lapse Tier Growth Percentage each year] 0.48676% TIER 4: REMAINDER OF NO-LAPSE ACCOUNT BALANCE 0.34344% TABLE OF MONTHLY NO-LAPSE INTEREST RATES (ATTAINED AGES 91 AND ABOVE) POLICY YEAR 1 INTEREST AMOUNT OF NO-LAPSE ACCOUNT BALANCE RATE TIER 1: FIRST \$5,000 1.14381% TIER 2: NEXT \$10,000 0.76510% TIER 3: NEXT \$50,000 0.56971% TIER 4: REMAINDER OF NO-LAPSE ACCOUNT BALANCE 0.42639% POLICY YEARS AFTER YEAR 1 **INTEREST** AMOUNT OF NO-LAPSE ACCOUNT BALANCE RATE TIER 1: FIRST [\$5,000 increased by No-Lapse Tier Growth Percentage each year] 1.14381% TIER 2: NEXT [\$10,000 increased by No-Lapse Tier Growth Percentage each year] 0.76510% TIER 3: NEXT [\$50,000 increased by No-Lapse Tier Growth Percentage each year] | 0.56971% TIER 4: REMAINDER OF NO-LAPSE ACCOUNT BALANCE 0.42639%

To obtain any of the benefits under this policy, write to the Company at its Home Office or to its nearest agent.

Please notify the Company promptly of any change in address.

**Annual Election -** Penn Mutual is a mutual life insurance company. It has no stockholders. The Owner of this policy is a member of Penn Mutual while this policy is in force during the life of the Insured and before surrender of this policy. Members have the right to vote in person or by proxy at the annual election of Trustees held at the Home Office, on the first Tuesday of March. If more information is desired, it may be obtained from the Secretary.

Policyholder Service Office of Company Address

The Penn Mutual Life Insurance Company Mail Code C2L, Philadelphia, PA 19172 Telephone # 1-800-523-0650

Name of Agent	
Address	
Telephone #	

If we at the Penn Mutual Life Insurance Company fail to provide you with reasonable and adequate service, you should feel free to contact:

Arkansas Insurance Department Consumer Services Division 400 University Tower Building Little Rock, AR 72204 1-800-852-5494

# Flexible Premium Adjustable Life Insurance Policy



- Death Benefit payable at death prior to Maturity Date
- Maturity Benefit Payable at Maturity Date
- Flexible premiums payable until Maturity Date
- Participating
- · Supplemental benefits, if any, listed on Page 3

The Penn Mutual Life Insurance Company, Philadelphia, Pennsylvania 19172 FL-08(S)(AR)

# The Penn Mutual Life Insurance Company

Founded 1847

Insured	William Penn	\$100,000	Specified Amount
Policy Number	00000000	April 1, 2008	Policy Date

The Penn Mutual Life Insurance Company agrees, subject to the provisions of this policy, to pay the Death Benefit to the Beneficiary upon receipt of due proof of the death of the Insured while this policy is in force and before the Maturity Date.

The Company also agrees to provide all of the other benefits stated in this policy.

This contract is made in consideration of the payment of premiums as provided in this policy.

The provisions on this and the following pages are part of this policy.

Executed on the Date of Issue by The Penn Mutual Life Insurance Company.

Managing Corporate Counsel and Secretary

Chairman and Chief Executive Officer

**FREE LOOK PERIOD** - This policy may be cancelled by returning it within 10 days after it is received by the owner. It must be returned to Penn Mutual or to the agent through whom it was purchased. This policy will then be **considered** void as of its inception. Any premium paid on it will be refunded.

**READ YOUR POLICY CAREFULLY.** This policy is a legal contract between the Owner and the Company.



## Flexible Premium Adjustable Life Insurance Policy

- Death Benefit payable at death prior to Maturity Date
- Maturity Benefit Payable at Maturity Date
- Flexible premiums payable until Maturity Date
- Participating
- · Supplemental benefits, if any, listed on Page 3

The Penn Mutual Life Insurance Company, Philadelphia, Pennsylvania 19172 FL-08(U)(AR)

# **Guide to Policy Sections**

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3	Qualification as Life Insurance	10	Basis of Computation of Values
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5	Lapse and Reinstatement	12	General Provisions
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Additional Policy Specifications, any supplemental agreements and a copy of any applications follow Section 14

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### 1. Policy Specifications

INSURED

AGE

WILLIAM PENN

\$100,000 SPECIFIED AMOUNT (INCLUDES POLICY VALUE)

POLICY NUMBER

0 000 000

APRIL 1, 2008 POLICY DATE

STANDARD NONTOBACCO RATE CLASS

LIFE INSURANCE QUALIFICATION TEST IS GUIDELINE PREMIUM TEST

MATURITY DATE IS APRIL 1, 2094 DATE OF ISSUE IS THE POLICY DATE

OWNER AND BENEFICIARY AS PROVIDED IN APPLICATION

Schedule of Benefits

Description

Amount

FLEXIBLE PREMIUM ADJUSTABLE LIFE INSURANCE POLICY OVERLOAN PROTECTION BENEFIT AGREEMENT

\$100,000 SPECIFIED AMOUNT

THE OVERLOAN PROTECTION BENEFIT AGREEMENT SPECIFIED LOAN PERCENTAGE IS 96%

Schedule of Planned Premiums

THE INITIAL PREMIUM OF \$1,141.89 WAS PAID ON THE POLICY DATE FOR 12 MONTHS. SUBSEQUENT PLANNED PREMIUMS ARE PAYABLE ANNUALLY AS FOLLOWS:

BEGINNING AS OF APRIL 1, 2009

PLANNED PREMIUM \$1,141.89

THE NO LAPSE DATE IS APRIL 1, 2094

NOTE: INSURANCE WILL TERMINATE IF THE PREMIUMS PAID AND THE INTEREST CREDITED ARE INSUFFICIENT TO COVER THE MONTHLY DEDUCTIONS, EXCEPT AS PROVIDED IN SECTION 4.

SECTION 7702A OF THE INTERNAL REVENUE CODE OF 1986 ESTABLISHES A CLASS OF LIFE INSURANCE CONTRACTS DESIGNATED AS "MODIFIED ENDOWMENT CONTRACTS." THE RULES RELATING TO WHETHER A POLICY WILL BE TREATED AS A MODIFIED ENDOWMENT CONTRACT ARE EXTREMELY COMPLEX. PLEASE CONSULT WITH A QUALIFIED TAX ADVISOR REGARDING YOUR OWN PERSONAL SITUATION.

## 1. Policy Specifications

#### **Schedule of Surrender Charges**

**Table of Surrender Charge Factors** 

Policy Year	Surrender Factor	Policy Year	Surrender Factor
1	100%	9	41%
2	90	10	34
3	83	11	27
4	76	12	20
5	69	13	13
6	62	14	6
7	55	15 and later	0
8	48		

#### Schedule of Policy Loads and Expense Charges

Maximum percent of premium load (applied to each premium applied to the policy)

Maximum per policy monthly expense charge \$9.00

Maximum Monthly Expense charge per \$1,000 of Specified Amount

(for the first 120 months following the policy date)

\$0.308

Maximum Monthly Expense charge per \$1,000 of Specified Amount

(for the first 120 months following an increase in Specified Amount)

As shown on Page 21

One time charge for the Overloan Protection Benefit Agreement  $\sqrt{3.5\%}$ 

#### **Schedule of Interest Rates**

Guaranteed Interest Rate 3% Effective Annual Rate

Death Benefit Discount Factor 1.0024663

## 2. Endorsements

To be made only by the Company

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#### 3. Qualification as Life Insurance

The life insurance qualification test for this policy will be the Guideline Premium Test unless otherwise elected in the application. The Life Insurance Qualification Test for this Policy is shown on Page 3. The test may not be changed at anytime after the policy is issued.

The Company will limit premium payments as necessary in order to qualify the policy as a life insurance contract under Section 7702. This contract may be unilaterally amended or modified to satisfy applicable law. The owner shall be permitted to refuse any such change unless noncompliance violates state or federal law. No payment will be returned or refused if it is necessary to continue coverage.

**Guideline Premium Test** - Under this test, the amount of premium that can be paid in a policy year may not exceed the Maximum Premium Limit. The Maximum Premium Limit for a policy year is the largest amount of premium which can be paid in that policy year such that the sum of the premiums paid under the policy will not at any time exceed the guideline premium limitation referred to in Section 7702 of the Internal Revenue Code of 1986, as amended, or as set forth in any applicable successor thereto. The Maximum Premium Limit for the following policy year will be shown on the Annual Report sent to the Owner.

In addition, a minimum margin must exist between the death benefit and the Policy Value. The margin is defined in Section 7702 and is based on the attained age of the Insured. The Basic Death Benefit of the policy will be adjusted accordingly with factors shown in the Table of Death Benefit Factors to satisfy the requirements of this portion of the test. See the Death Benefit Section for further details.

**Cash Value Accumulation Test -** Under this test, the Policy Value cannot at any time exceed the net single premium required to fund the future benefits under the policy. The net single premium is defined in Section 7702 of the Internal Revenue Code. The Basic Death Benefit of the policy will be adjusted accordingly with factors shown in the Table of Death Benefit Factors to satisfy the requirements of this test. See the Death Benefit Section for further details.

The Company reserves the right to restrict Policy transactions as necessary in order to qualify the policy as a life insurance contract under Section 7702. If it is subsequently determined that policy does not satisfy Section 7702, the Company may take whatever steps are appropriate and necessary to attempt to cause such a policy to comply with Section 7702.

#### 4. Premiums

**Payment of Premiums -** Premiums are payable while this policy is in force until the Maturity Date. The first premium is due on the Policy Date. Premiums after the Policy Date may be paid in any amount and at any interval subject to the following conditions:

- (1) No premium payment may be less than \$25.
- (2) The Company requires submission of evidence of insurability on subsequent premiums that cause an immediate increase in the difference between the Death Benefit and the Policy Value. The increase in the difference between the Death Benefit and the Policy Value will be incontestable with respect to statements made in the evidence of insurability for that increase after the increase has been in force during the life of the Insured for two years from its effective date. Any application for such increase will be attached to and made a part of the policy.
- (3) If the Guideline Premium Test is in effect, total premiums paid in any policy year may not exceed the Maximum Premium Limit for that policy year. If excessive premium is paid the Company will refund only the portion that is over the Maximum Premium Limit. No payment will be returned or refused if it is necessary to continue coverage.

#### 4. Premiums (continued)

Each premium after the first is payable at the Company's Home Office. A receipt signed by the President or the Secretary will be given on request.

**No-Lapse Guarantee** – This policy will not lapse as a result of a Net Cash Surrender Value insufficient to cover the Monthly Deduction for the following month if, on a monthly anniversary prior to the Maturity Date shown on Page 3, the No-Lapse Guarantee Requirement is satisfied.

**No-Lapse Guarantee Requirement –** The No-Lapse Guarantee Requirement is satisfied if, on a monthly anniversary prior to the Maturity Date shown on Page 3, the No-Lapse Guarantee Account less any outstanding indebtedness exceeds zero.

The No-Lapse Guarantee Requirement is not satisfied if the indebtedness is greater than the Cash Surrender Value.

Note that the No-Lapse Guarantee Account, the No-Lapse Percent of Premium Charge, the No-Lapse COI Charges, and the No-Lapse Interest Rates are not used to determine values and benefits under the policy. These values are only used to determine whether or not the No-Lapse Guarantee Requirement is satisfied.

The Company reserves the right to determine that the No-Lapse Guarantee Requirement has not been satisfied if at any time after a change of Owner or Beneficiary, the Company concludes that the new Owner or new Beneficiary would not have had an insurable interest in the Insured at the time the policy was issued. In addition, the Company reserves the right to determine that the No-Lapse Guarantee Requirement has not been satisfied if at any time, a new Owner or new Beneficiary has obtained the policy ownership and/or policy beneficiary designation with the intent to transfer ownership or any other benefits under the policy to a third party that does not possess an insurable interest in the Insured.

**No-Lapse Guarantee Account** –On the Policy Date, the No-Lapse Guarantee Account is the initial premium paid less the sum of:

- (a) the applicable No-Lapse Percent of Premium Charge shown in the Additional Policy Specifications; and
- (b) the applicable No-Lapse COI Charge for Base Coverage; and
- (c) the applicable No-Lapse COI Charge for each Additional Insured Rider.

On each Monthly Anniversary while this agreement is in force, the No-Lapse Guarantee Account is the sum of:

- (a) the No-Lapse Guarantee Account on the preceding Monthly Anniversary;
- (b) one month's interest on (a) using the applicable No-Lapse Interest Rate shown in the Additional Policy Specifications;
- (c) any premium paid since the preceding Monthly Anniversary reduced by the applicable No-Lapse Percent of Premium Charge; and
- (d) interest on (c) using the applicable No-Lapse Interest Rates from the date of receipt in the Home Office to the Monthly Anniversary;

less the sum of:

- (a) any partial surrender since the preceding Monthly Anniversary;
- (b) interest on (a) using the applicable No-Lapse Interest Rates from the date of surrender to the Monthly Anniversary;
- (c) the applicable No-Lapse COI Charge for Base Coverage; and
- (d) the applicable No-Lapse COI Charge for each Additional Insured Rider.

**No-Lapse Interest Rate** – The No-Lapse Interest Rate applied to the No-Lapse Guarantee Account is tiered based on the amount of the No-Lapse Guarantee Account as shown in the Additional Policy Specifications. The tiers are set at issue for the first policy year and then increase each policy year by the No-Lapse Tier Growth Percentage shown in the Additional Policy Specifications.

#### 4. Premiums (continued)

**No-Lapse COI Charge** – The No-Lapse COI Charge is determined on a monthly basis. For Base Coverage, it is calculated as (a) multiplied by (b) where:

- (a) is the applicable No-Lapse COI Rate shown in the Additional Policy Specifications; and
- (b) is the No-Lapse Net Amount at Risk.

For each Additional Insured Rider, it is calculated as (a) multiplied by (b) where:

- (a) is the applicable No-Lapse COI Rate for the Additional Insured Coverage shown in the Additional Policy Specifications; and
- (b) is the Specified Amount of the Additional Insured Coverage, as shown on Page 3.

No-Lapse Net Amount at Risk - The No-Lapse Net Amount at Risk is equal to (a) minus (b) where:

- (a) is the Specified Amount at the beginning of the policy month, divided by the Death Benefit Discount Factor shown on Page 3; and
- (b) is the No-Lapse Guarantee Account at the beginning of the policy month before the deduction of No-Lapse COI Charges.

Changes in the Specified Amount, the addition, deletion or change of any supplemental agreements to this policy, or a change in the rate class of the Insured before the No-Lapse Date may impact the amount of the No-Lapse Guarantee Account. As a result, additional premiums may be required on the date of change in order to meet the No-Lapse Guarantee Requirement.

**Continuation of Insurance** - If premium payments cease or if insufficient premiums are paid, the insurance provided under this policy, including benefits provided by any supplemental agreements attached to this policy, will continue, subject to the Grace Period provision, in accordance with the provisions of this policy and any such supplemental agreements for as long as the Net Cash Surrender Value is sufficient to keep it in force, or if the No-Lapse Guarantee Account less any outstanding indebtedness exceeds zero as described in the No-Lapse Guarantee Requirement provision above.

Grace Period - If, on a Monthly Anniversary prior to the Maturity Date shown on Page 3:

- (a) the Net Cash Surrender Value is insufficient to cover the Monthly Deduction for the following policy month; and
- (b) the No-Lapse Guarantee Requirement is not met.

then a grace period of 61 days will be allowed for the payment of premium sufficient to keep this policy in force. The payment required is the lesser of the Monthly Deduction or the amount necessary to meet the No-Lapse Guarantee Requirement.

Notice of the amount of premium sufficient to keep this policy in force will be sent to the last known address of the Owner. The notice will be sent at least 30 days before the end of the 61-day grace period. This policy will remain in force during the grace period.

#### 5. Lapse and Reinstatement

**Lapse -** If a premium sufficient to keep this policy in force is not paid during the grace period, this policy will lapse at the end of the grace period. At lapse this policy will terminate without value and cease to be in force. Any deduction for the Cost of Insurance after termination will not be considered a reinstatement of the policy nor a waiver by the Company of the termination.

#### 5. Lapse and Reinstatement (continued)

Reinstatement - This policy may be reinstated within five years after lapse. A reinstatement is subject to:

- (a) the submission of evidence of insurability satisfactory to the Company:
- (b) the payment or reinstatement of any indebtedness which existed at the end of the grace period; and
- (c) the payment of a premium sufficient to cover the lesser of: (i) the amount necessary to meet the No-Lapse Guarantee Requirement at the date of reinstatement and for three policy months following the reinstatement date, or (ii) an amount to make the Cash Surrender Value positive plus the monthly deductions for the three policy months following the reinstatement date.

The effective date of a reinstatement will be the date of approval by the Company of the application for reinstatement. Such application will be attached to and made a part of the reinstated policy. Following reinstatement, the Policy Date continues to be the date shown on Page 3.

The policy value on the date of reinstatement is the sum of:

- (a) the policy value at the beginning of the grace period of lapse, including any indebtedness;
- (b) interest on (a) at the minimum interest rate per year until the date of reinstatement;
- (c) any dividend credited to the policy;
- (d) interest on (c) at the minimum interest rate until the date of reinstatement; and
- (e) the payment made upon reinstatement reduced by the percent of premium charge

less the sum of:

- (a) the Monthly Deductions for the grace period;
- (b) interest on (a) at the minimum interest rate per year until the date of reinstatement; and
- (c) the Monthly Deduction for the policy month following the date of reinstatement.

The surrender charge set forth in the Surrender of Policy Section will continue to apply to any surrender of this policy following reinstatement. The surrender charge will be calculated based on the policy date and will include the period while the policy was lapsed.

Following reinstatement, the provisions of the No-Lapse Guarantee set forth in Section 4 will again be applicable until the Maturity Date shown on Page 3.

### 6. Policy Loans

The Owner may obtain a loan while this policy is in force during the life of the Insured. The loan, plus any existing indebtedness, may not be greater than the Loan Value of this policy on the date of the loan.

The Company may defer making a loan for up to six months from the date of the loan request. However, a loan to pay a premium due on a policy issued by the Company will not be deferred.

**Loan Value -** The Loan Value is that amount which, with interest at the then current loan interest rate on this policy, will accumulate at the next policy anniversary to (a) less (b), where:

- (a) is the Cash Surrender Value on the date as of which the Loan Value is being determined; and
- (b) is the Monthly Deductions for the period from the date as of which the Loan Value is being determined until the next policy anniversary.

#### 6. Policy Loans (continued)

**Loan Interest** - Loans will bear interest at an adjustable loan interest rate. The loan interest rate will be determined by the Company as of the first day of each calendar year. Such rate will be effective on the date as of which it is determined and will apply to any new or outstanding loan under this policy during the next calendar year.

The loan interest rate will be determined by comparing the loan interest rate in effect for the preceding calendar year with a maximum interest rate defined by law and described below. Any change in the loan interest rate will be subject to the following:

- (1) The loan interest rate will be lowered to be equal to or less than the legal maximum interest rate if such legal maximum interest rate is 1/2% or more lower than the loan interest rate in effect during the preceding calendar year.
- (2) The loan interest rate may be increased, by at least 1/2% but not higher than the legal maximum interest rate, if the legal maximum interest rate is 1/2% or more higher than the loan interest rate in effect during the preceding calendar year.

The legal maximum interest rate used in determining the loan interest rate is the greater of:

- (a) Moody's Corporate Bond Yield Average—Monthly Average Corporates as published by Moody's Investors Service, Inc. for the calendar month ending two months prior to the date as of which the loan interest rate is determined; or
- (b) the minimum interest rate used to calculate policy values under this policy plus 1 percentage point per year.

If Moody's Corporate Bond Yield Average - Monthly Average Corporates is no longer published, the rate used in its place will be as established by law or by regulation of the insurance supervisory official of the jurisdiction in which this policy is delivered.

The Company will:

- (a) notify the Owner of the initial loan interest rate at the time that a loan is made; and
- (b) if there is a loan outstanding on this policy, give the Owner advance notice of any increase in the loan interest rate.

Loan interest is due and payable at the end of each policy year. If the interest is not paid when due, it will be added to the loan. It will then bear interest at the rate of interest on loans.

**Indebtedness** - Indebtedness means outstanding loans on this policy plus any loan interest due or accrued. Indebtedness may be repaid in full or in part at any time while this policy is in force during the life of the Insured. This policy is the only security for indebtedness on it. If the indebtedness is greater than the Cash Surrender Value, a notice of pending termination will be mailed to the last known address of the Owner and of any assignee on record. If the excess indebtedness is not paid to the Company, this policy will terminate 61 days after the notice is mailed.

This policy will not terminate in a policy year as the sole result of a change in the rate of interest on loans until the time at which it would otherwise have terminated if there had been no change in the rate of interest on loans during that policy year.

#### 7. Owner and Beneficiary

**Owner -** The Owner of this policy is as stated in the application unless changed by a subsequent owner designation or assignment. While this policy is in force before the death of the Insured, the Owner may exercise all of the rights in it without the consent of any other person.

**Beneficiary** - The Beneficiary of this policy is as stated in the application unless changed by a subsequent beneficiary designation on a form provided by the Company. If no other provision is made, the interest of a Beneficiary who dies before the death of the Insured will pass to the Owner.

### 7. Owner and Beneficiary (continued)

**Change of Owner or Beneficiary -** The Owner may transfer ownership or change the Beneficiary by filing a written designation at the Home Office on a form provided by the Company. The designation will take effect as of the date it is signed by the Owner, subject to any action taken by the Company prior to the time that the designation is received at the Home Office. As noted above in Section 4, changes of Owner or Beneficiary may adversely impact the No-Lapse Guarantee.

Unless otherwise stated in a designation, the following rules will apply to terms of kinship:

- (a) A legally adopted child of any person will be considered the child of the adopting parent.
- (b) The brothers and sisters of a person will include those who have only one parent in common with the person, but will not include stepbrothers or stepsisters.
- (c) Any reference to children will not include stepchildren and any reference to parents will not include stepparents.

**Assignment -** The Owner may assign this policy while it is in force during the life of the Insured. The rights of the Owner and of any Beneficiary will be subject to the rights of an assignee under the terms of an assignment. No assignment will bind the Company until the original, or a copy signed by the Owner, on a form provided by the Company, has been filed at the Home Office. The Company is not responsible for the effect or the validity of any assignment.

#### 8. Death and Maturity Benefits

Basic Death Benefit - The Basic Death Benefit prior to the Maturity Date will be as follows:

- (1) If the Specified Amount includes the Policy Value, as shown on Page 3, the Basic Death Benefit will be equal to the greater of:
  - (a) the Specified Amount; or
  - (b) the Policy Value multiplied by an attained age factor based on the attained age of the Insured shown in the Table of Death Benefit Factors.
- (2) If the Specified Amount does not include the Policy Value, as shown on Page 3, the Basic Death Benefit will be equal to the greater of:
  - (a) the Specified Amount plus the Policy Value; or
  - (b) the Policy Value multiplied by an attained age factor based on the attained age of the Insured shown in the Table of Death Benefit Factors.

The Basic Death Benefit on the Maturity Date and beyond will be equal to the Net Policy Value, together with interest at the current rate set by the Company, which will not be less than the minimum interest rate, compounded annually, until the death of the insured.

**Amount of Death Benefit -** The Death Benefit payable at the death of the Insured while this policy is in force will be equal to the sum of:

- (a) the Basic Death Benefit on the date of death of the Insured;
- (b) any dividend payable at death of the Insured; and
- (c) any benefit provided by a supplemental agreement attached to this policy and payable because of the death of the Insured:

less the sum of:

- (a) any indebtedness on this policy at the time of the death of the Insured; and
- (b) if the death of the Insured occurs during a grace period, the payment deducted should be the lesser of the Monthly Deductions or the amount needed to meet the No-Lapse Guarantee Requirement.

#### 8. Death and Maturity Benefits (continued)

**Suicide Exclusion -** If the Insured dies by suicide, while sane or insane, within two years from the Policy Date, the Death Benefit will be limited to the premiums paid less any indebtedness and any partial surrenders.

If the Insured dies by suicide, while sane or insane, within two years from the effective date of any increase in the Specified Amount, the Death Benefit with respect to that increase will be limited to the Monthly Deductions made for that increase.

Payment of Death Benefit - The Death Benefit will be paid to the Beneficiary in one sum or, if elected, under an income payment option. Settlement shall be made within 60 days after receipt of due proof of death. The Company will require surrender of the policy and proof of the interest of the claimant. The Company will pay interest from the date of death to the date of payment. The interest rate will be determined each year by the Company, but will not be less than the minimum interest rate per year compounded annually, or such higher rate as may be required by law.

**Amount of Maturity Benefit -** The Maturity Benefit payable if the Insured is living on the Maturity Date and if this policy is then in force will be equal to the Net Policy Value on that date.

**Payment of Maturity Benefit -** The Maturity Benefit will be paid to the Owner in one sum or, if elected, under an Income Payment Option.

#### 9. Surrender of Policy

**Surrender -** The Owner may surrender this policy for its Net Cash Surrender Value by filing a written request with the Company. The Net Cash Surrender Value may be taken in one sum or it may be left with the Company under an income payment option. This policy will terminate and cease to be in force if it is surrendered for one sum.

If this policy is surrendered within 30 days after a policy anniversary, the Net Cash Surrender Value payable on surrender will not be less than the Net Cash Surrender Value on that policy anniversary less any policy loans and partial surrenders made since the anniversary.

The Company may defer the payment of the Net Cash Surrender Value in one sum for up to six months from the date of the surrender request. If the payment is deferred for 30 days or more, it will bear interest at the minimum interest rate per year compounded annually while it is deferred.

Net Cash Surrender Value - The Net Cash Surrender Value is the Net Policy Value decreased by any surrender charge.

Net Policy Value - The Net Policy Value is the Policy Value decreased by any indebtedness on this policy.

Cash Surrender Value - The Cash Surrender Value is the Policy Value decreased by any surrender charge.

Surrender Charge - The surrender charge for the initial Specified Amount is determined by multiplying (a) times (b), where:

- (a) is the appropriate surrender factor from the Table of Surrender Factors determined from the Policy Date; and
- (b) is 90% of the lesser of:
  - (i) the maximum surrender charge premium shown on Page 3;
  - (ii) the total premiums paid in the first policy year; and
  - (iii) \$25.00 per thousand of initial Specified Amount.

### 9. Surrender of Policy (continued)

The surrender charge for each increase in Specified Amount is based on the amount of the increase and on the attained age of the Insured at the time of the increase. All premiums paid during the first policy year after the effective date of an increase are applied to the increase in Specified Amount for the calculation of the surrender charge. The surrender charge is determined by multiplying (a) times (b), where:

- (a) is the appropriate surrender factor from the Table of Surrender Factors determined from the Policy Date; and
- (b) is 90% of the lesser of:
  - (i) the maximum surrender charge premium based on the attained age and rate class of the Insured at the effective date of the increase;
  - (ii) the total premium paid with the increase for 12 policy months after the effective date of the increase; and
  - (iii) \$25.00 per thousand of the increase amount.

**Partial Surrender** - The Owner may make a partial surrender of this policy for any portion of the Net Cash Surrender Value that exceeds \$250 by filing a written request with the Company. However, no partial surrender may be made for less than \$250 and no more than twelve partial surrenders may be made under this policy in any policy year. No partial surrender may be made which would reduce the Specified Amount to less than \$50,000. A processing fee of 2% of the amount surrendered, but not more than \$25 will be made for each partial surrender. The processing fee will be deducted from the available Net Cash Surrender Value and will be considered part of the partial surrender.

Any partial surrender will reduce the Policy Value by the amount of the partial surrender. If the Specified Amount includes the Policy Value, the Specified Amount will also be reduced by the amount of the partial surrender that exceeds the difference between the Death Benefit and the Specified Amount. In those instances, the Specified Amount will be reduced in the following order:

- (a) The most recent increase in Specified Amount, if any, will be decreased first.
- (b) The next most recent increases in Specified Amount, if any, will then be successively decreased.
- (c) The initial Specified Amount will then be decreased.

The Surrender Charge will not be reduced as a result of a partial surrender.

The Company may defer the payment of the amount of a partial surrender for up to six months from the date of the partial surrender request. However, a partial surrender to pay a premium due on a policy of the Company will not be deferred. If the payment is deferred for 30 days or more, it will bear interest at the minimum interest rate per year compounded annually while it is deferred.

Systematic Partial Surrender Program – The Systematic Partial Surrender Program is a program of periodic distribution of a portion of the Policy Value designated by the Company. The Company reserves the right to discontinue such a program at any time. The program includes periodic distribution to the Owner of a portion of the Policy Value through policy loans and partial surrenders while the Insured is alive and the policy is in force. Contact the Company for details of how this program works. A processing fee of 2% of the amount surrendered, but not more than \$25, will be made for each year the Systematic Partial Surrender Program is active.

#### 10. Basis of Computation of Values

Policy Value - On the Policy Date the Policy Value is the initial premium paid less the sum of:

- (a) the percent of premium charge, and
- (b) the Monthly Deduction for the first policy month.

#### 10. Basis of Computation of Values (continued)

On each Monthly Anniversary while this policy is in force, the Policy Value is the sum of:

- (a) the Policy Value on the preceding Monthly Anniversary;
- (b) one month's interest on (a);
- (c) any premium paid since the preceding Monthly Anniversary reduced by the percent of premium charge;
- (d) interest on (c) from the date of receipt in the Home Office to the Monthly Anniversary; and
- (e) any dividend credited to the Policy Value on the Monthly Anniversary;

#### less the sum of:

- (f) any partial surrender since the preceding Monthly Anniversary;
- (g) interest on (f) from the date of surrender to the Monthly Anniversary; and
- (h) the Monthly Deduction for the following policy month.

On any date other than a Monthly Anniversary, the determination of the Policy Value will be consistent with the above, except (h), which will only be deducted on a Monthly Anniversary. The value will include pro-rata crediting of interest. There will be no pro-rata debiting of mortality charges.

Monthly Deduction - The Monthly Deduction is the sum of:

- (a) the Cost of Insurance for the policy month;
- (b) the monthly per policy expense charge;
- (c) the monthly expense charge per \$1,000 of Specified Amount;
- (d) the Monthly Deduction for the policy month for any benefits provided by a supplemental agreement made a part of this policy.

**Net Amount at Risk** - The Net Amount at Risk is equal to the Basic Death Benefit at the beginning of the policy month, divided by the Death Benefit Discount Factor, minus the Policy Value at the beginning of the policy month before the Monthly Deduction.

If the Specified Amount does not include the Policy Value, the Policy Value will be allocated to the initial Specified Amount segment in order to determine the Net Amount at Risk.

If there have been any increases in the Specified Amount, the Policy Value will be allocated to the initial Specified Amount segment for determining the Net Amount at Risk. If the Policy Value exceeds the initial Specified Amount, the excess will be allocated to the increases in Specified Amount in the order of the increases. Any increases in the Basic Death Benefit in order to maintain the required minimum margin between the Basic Death Benefit and the Policy Value will be allocated to the most recent increase in Specified Amount.

**Cost of Insurance -** The Cost of Insurance is determined on a monthly basis. It is determined separately for the initial segment as well as for each additional segment created as the result of an increase in the Specified Amount. The total Cost of Insurance for a policy month is calculated as the sum of (a) multiplied by (b) for each segment where:

- (a) is the applicable Cost of Insurance Rate divided by 1,000;
- (b) is the Net Amount at Risk for that segment.

**Cost of Insurance Rate** - The Cost of Insurance Rate is based on policy year and on the issue age and rate class of the Insured. The Cost of Insurance Rate for any increase in Specified Amount will be based on the policy duration since the effective date of the increase and on the attained age and rate class of the Insured on the effective date of the increase.

The Cost of Insurance Rate will be determined by the Company as described in the Determination of Nonguaranteed Factors provision. However, these rates will not exceed those shown in the Additional Policy Specifications. Such maximum rates are based on the 2001 CSO (80) Smoker and NonSmoker Ultimate Mortality Table, Age Nearest Birthday.

#### 10. Basis of Computation of Values (continued)

**Interest Rate -** The minimum interest rate that will be used in calculating the Policy Value under this policy is listed on Page 3.

The actual interest that will be credited to the Policy Value will be at rates set by the Company. Different rates will normally apply to (i) the Net Policy Value and (ii) the portion of the Policy Value represented by indebtedness.

Such rates will not be less than the minimum rate stated above.

The portion of the Net Policy Value that results from premiums paid during a specific calendar month will be credited with interest at the rate set by the Company for premium payments in that month. This credited rate will apply to the portion of the Net Policy Value until the end of the same calendar month in the following year. At the end of such period, that portion of the Net Policy Value will be credited at a new rate set by the Company that will be applicable for the next thirteen months. This procedure will recur at the end of each interest period.

If the Company credits interest at a rate in excess of the minimum interest rate, policies that have been in force for more than 10 years will be credited with interest at a rate that is greater than the rate credited to policies that have been in force less than 10 years. The difference will be equal to the monthly equivalent of 0.25% per year compounded annually. Such difference will not be applicable to that portion of the Policy Value represented by indebtedness.

**Expense Charges -** The actual monthly per policy expense charge, monthly expense charge per \$1,000 of Specified Amount, and percent of premium charge will be determined by the Company as described in the Determination of Nonguaranteed Factors provision. However, these actual expense charges will not exceed the maximum expense charges stated on Page 3.

The per \$1,000 of Specified Amount expense charge on the initial Specified Amount will be eliminated for policies that have been in force over ten policy years. The elimination of the per \$1,000 of Specified Amount expense charge is due to the fact that the amortization of acquisition expenses is completed by the end of the tenth policy year.

The per \$1,000 of Specified Amount expense charge for any increases in Specified Amount will be eliminated after the charge has been assessed for 10 years from the date of the increase. This charge is also due to the amortization acquisition expense for that increase being completed by the end of the tenth year.

**Determination of Nonguaranteed Factors -** Cost of Insurance Rates, Expense Charges, and Interest Rates will be determined by the Company based on expectations as to future mortality, investment, expense, and persistency experience. The Company will not adjust such rates or charges as a means of recovering prior losses or as a means of distributing prior profits.

**Computation of Values -** All policy values and benefits are equal to or greater than those required by the law of the jurisdiction in which this policy is delivered. A detailed statement of the method of computing reserves and Policy Values has been filed with the insurance supervisory official of that jurisdiction if required.

#### 11. Policy Changes

**Right to Make Change** - At any time while this policy is in force after the first policy year, the Owner may request changes as set forth in this section. No change will be permitted that would result in the Death Benefit under this policy not being excludable from gross income due to not satisfying the requirements of Section 7702 of the Internal Revenue Code of 1986, as amended, or as set forth in any applicable successor provision thereto. In addition, each change is subject to the conditions stated. This policy will be amended as the result of any such change.

**Increase in Specified Amount** - An increase in Specified Amount must be applied for on a written application and is subject to the Company's underwriting guidelines in effect at the time of the increase. Evidence of insurability satisfactory to the Company must be submitted. Any increase in the Specified Amount must be for at least \$10,000.

#### 11. Policy Changes (continued)

**Decrease in Specified Amount** - Any decrease in the Specified Amount must be at least \$10,000. The Specified Amount may not be decreased to less than \$50,000. No decrease in the Specified Amount may be made in the first policy year. No decrease may be made in the first year following the effective date of an increase in the Specified Amount.

Any decrease in the Specified Amount will become effective on the Monthly Anniversary that coincides with or next follows the receipt by the Company of the request. The decrease in the Specified Amount will be in the following order:

- (a) The most recent increase in the Specified Amount, if any, will be decreased first.
- (b) The next most recent increases in the Specified Amount, if any, will then be successively decreased.
- (c) The initial Specified Amount will then be decreased.

The surrender charge will not change as a result of a decrease in the Specified Amount. No surrender charge will be deducted from the Policy Value upon a decrease in the Specified Amount. The monthly expense charge per \$1000 of Specified Amount will not change as a result of a decrease in the Specified Amount.

Change in Specified Amount Option - If the Specified Amount does not include the Policy Value, a request may be made to change this policy so that the Specified Amount includes the Policy Value. The Specified Amount after the change will be equal to the Specified Amount before the change plus the Policy Value on the date of the change. The effective date of the change will be the Monthly Anniversary that coincides with or next follows the date of receipt by the Company of the request to make the change.

If the Specified Amount includes the Policy Value, a request may be made to change this policy so that the Specified Amount does not include the Policy Value. The Specified Amount after the change will be equal to the Specified Amount before the change less the Policy Value on the date of the change. Any application for such increase will be attached to and made a part of the policy. The effective date of the change will be the Monthly Anniversary that coincides with or next follows the date of receipt by the Company of the request to make the change.

The Specified Amount after the change must be at least \$50,000. No more than one change in the Specified Amount option may be made in any policy year.

#### 12. General Provisions

**The Contract** - This policy, all applications and any supplemental agreements or amendments constitute the entire contract when attached to the policy. Only the President, a Vice President, the Secretary, the Chief Actuary, an Actuary or an Associate Actuary may, on behalf of the Company, modify this policy or waive any of its conditions. No agent is authorized to modify this contract or to make any promise as to the future payment of dividends or interest.

At any time the Company may make such changes in this policy as are necessary (i) to assure compliance at all times with the definition of life insurance prescribed by federal income tax law, or (ii) to make the policy conform with any law or regulation issued by any government agency to which it is subject. This contract may be unilaterally amended or modified to satisfy applicable law. The owner shall be permitted to refuse any such change unless noncompliance violates state or federal law.

**Incontestability** - All statements made in any application for this policy are representations and not warranties. No statement will void this policy or be used to contest a claim under it unless the statement is contained in a written application, a copy of which is attached to and made a part of this policy.

#### 12. General Provisions (continued)

This policy will be incontestable after it has been in force during the life of the Insured for two years from the Policy Date. Any increase in the Specified Amount will be incontestable with respect to statements made in the evidence of insurability for that increase after the increase has been in force during the life of the Insured for two years from its effective date.

This policy will be incontestable with respect to statements made in an application for reinstatement after it has been in force during the life of the Insured for two years from the effective date of the reinstatement.

**Duration of Coverage** - The duration of coverage under this policy will depend on the amount, timing and frequency of premium payments; changes in the Specified Amount or benefits; the interest rates credited or investment return; the cost of insurance rates charged; percent of premium charge; expense charges; surrenders, and the amount and timing of any partial surrenders or policy loans.

**Participation -** This policy will participate in divisible surplus while it is in force except as stated in the Income Payment Options section. The share of such surplus, if any, to be apportioned to this policy as a dividend will be determined each year by the Company.

Any dividend will be credited to the Policy Value, unless the Owner elects to have it paid in cash.

**Policy Date** - The Policy Date shown on Page 3 is the date from which policy years, months and anniversaries are determined.

**Monthly Anniversary -** The Monthly Anniversary is the day in each calendar month that is the same day of the month as the Policy Date.

**Age -** The age shown on Page 3 is the insurance age of the Insured. This is the age of the Insured on the birthday nearest the Policy Date. Attained age means the insurance age of the Insured increased by the number of whole years and months after the Policy Date.

**Misstatement of Age** - If the age of the Insured has been misstated, the Death Benefit under this policy will be the amount which would have been provided by the most recent Cost of Insurance charge at the correct age. No adjustment in the Policy Value will be made. Any date shown on Page 3 that is based on an incorrect age may be changed to be consistent with the correct age.

**Policy Payments -** All payments by the Company under this policy are payable at the Home Office. The Company may require the return of this policy upon surrender for the Net Cash Surrender Value or payment of the Death Benefit.

**Annual Report** - Each year a report will be sent to the Owner which shows the current policy values, premiums paid and deductions made since the last report, any outstanding policy loans, and any other information required by the Insurance Department of the jurisdiction in which this policy is delivered.

**Projection of Benefits and Values -** Upon request, the Company will provide a projection of illustrative future Death Benefits and Policy Values. The request for a projection must be made in writing by the Owner. The Company may charge a fee for this service.

**Deferral of Maturity** - Upon the written request of the Owner, this policy will continue in force beyond the Maturity Date. The Death Benefit will be the Net Policy Value on the Maturity Date together with interest at the current rate set by the Company, which will be not less than the minimum interest rate compounded annually, until the death of the Insured.

#### 13. Income Payment Options

**Election of Income Payment Option**—An income payment option may be elected in place of a one sum payment of any amount payable upon the death of the Insured or upon surrender.

The Owner may elect an income payment option or change a previous election while this policy is in force before the death of the Insured. If no election is in effect at the time of the death of the Insured, the Beneficiary may elect an income payment option before any payment of the Death Benefit has been made and within one year of the date of death.

The amount applied under an income payment option must be at least \$5,000. No election may provide for income payments of less than \$50 each.

**Option 1—Interest Income**—The Company will hold the amount applied at interest. Interest will be paid monthly, quarterly, semiannually or annually.

**Option 2— Income for a Fixed Period**—The Company will pay the amount applied, with interest, in equal monthly payments for a fixed period. The fixed period may not be greater than 30 years.

**Option 3— Income of a Specified Amount**—The Company will make payments of a specified amount until the total amount applied, with interest, has been paid. The payments may be made monthly, quarterly, semiannually or annually. The final payment may be less than the specified amount. The total of the payments to be made each year must be at least \$75 for each \$1,000 applied.

Option 4— Life Income—The Company will pay equal monthly payments during the life of the option annuitant.

**Option 5— Life Income with Guaranteed Period**—The Company will pay equal monthly payments for a stated guaranteed period and thereafter during the life of the option annuitant. The guaranteed period may be 5 years, 10 years or 20 years.

**Option 6— Life Income with Refund Period**—The Company will pay equal monthly payments during the life of the option annuitant. If necessary, the payments will continue after the death of the option annuitant until the total of all payments made, including a smaller final payment, if required, equals the total amount applied.

**Option 7— Joint and Survivor Life Income**—The Company will pay equal monthly payments during the joint life of two option annuitants and thereafter during the life of the survivor.

**Income Amount—Participation—**The income under Options 1 and 2 will be based on interest at a rate of 1.5% per year compounded annually. The unpaid balance of the amount applied under Option 3 will be credited with interest at a rate of 1.5% per year compounded annually.

Options 1, 2 and 3 will participate in divisible surplus by the payment or crediting of additional interest in such amount, if any, as determined each year by the Company. Additional interest will increase the income payments under Options 1 and 2. Additional interest will lengthen the period during which payments are made under Option 3.

The monthly income under Options 4, 5, 6 and 7 will equal 103% of the monthly income under a comparable single premium nonparticipating annuity issued by the Company at the time that the income payments are to begin. In no event will the monthly income under these life income options be less than the income stated in the Income Payment Option Tables. Options 4, 5, 6 and 7 will not participate in divisible surplus.

**Income Period**—The income period under an option will begin on the date of death or surrender. Income payments under Options 1 and 3 will be made at the end of the payment interval. Income payments under Options 2, 4, 5, 6 and 7 will be made at the beginning of the payment interval.

**Option Annuitant**—Option annuitant means a natural person on whose life the income payments under Options 4, 5, 6 and 7 are based.

## 13. Income Payment Options (continued)

The Company may require proof of the age and of the continued life of an option annuitant. If the age of an option annuitant has been misstated, an appropriate adjustment will be made in the income payments.

Withdrawal Privilege-Unless the election states otherwise, the payee under an income payment option may:

- (a) before any income payment has been made, withdraw the amount applied under the option; or
- (b) withdraw the present value of the income payments to become due during any fixed, guaranteed or refund period; or
- (c) withdraw the balance held under Option 1 or 3 plus any accrued interest.

There will be no right to withdraw the present value of the income payments falling due after the guaranteed or refund period under Options 5 and 6. There will be no right to withdraw the present value of any income payments under Options 4 and 7.

The Company may defer the payment of the amount withdrawn for up to six months from the date of a withdrawal request.

**Present Value**—The present value of the income payments under Option 2 will be based on interest at a rate of 1.5% per year compounded annually. The present value of the remaining income payments during a guaranteed or refund period under a life income option will be based on interest at a rate set by the Company at the time income payments are to begin.

**Death of Payee**—Upon the death of the payee under an income payment option, the Company will pay the following to the payee's executors or administrators unless stated otherwise in an election consented to by the Company:

- (a) the balance of the amount held under Option 1 or 3 plus any accrued interest; or
- (b) the present value of the income payments to become due during the fixed period under Option 2; or
- (c) if the option annuitant under Option 5 or 6 has died, the present value of the income payments, if any, to become due during the guaranteed or refund period; or
- (d) if any option annuitant under Option 4, 5, 6 or 7 is living, any income payments as they become due during the option annuitant's life plus, upon the death of the option annuitant under Option 5 or 6, the present value of the income payments, if any, to become due during the guaranteed or refund period.

**Assignment**— **Creditors**—The amount applied under an income payment option and the payments under the option may not be assigned and, to the extent permitted by law, will not be available to anyone who has a claim against the payee.

## 14. Income Payment Option Table

The following tables show the amount of the first monthly income payment for each \$1,000 of value applied under an annuity option. "Age" as used in the tables for Options 2,3, and 4 means an adjusted age determined in the following manner from the actual age of the Annuitant on the birthday nearest the date of the first payment:

Date of First Payment Before calendar year 2010 2010-2019 2020-2029 2030 and later Adjusted Age
Actual Age
Actual age decreased by 1
Actual age decreased by 2
Actual age decreased by 3

Option 1—Interest Income

Option 2—Income for Fixed Period of Years

			Monthly		Monthly		Monthly
Payment Interval	Amount	Years	Income	Years	Income	Years	Income
		1	\$83.90	11	\$8.21	21	\$4.62
Annually	\$15.00	2	42.26	12	7.58	22	4.44
		3	28.39	13	7.05	23	4.28
Semiannually	7.47	4	21.45	14	6.59	24	4.13
		5	17.28	15	6.20	25	3.99
Quarterly	3.73	6	14.51	16	5.85	26	3.86
		7	12.53	17	5.55	27	3.75
Monthly	1.24	8	11.04	18	5.27	28	3.64
		9	9.89	19	5.03	29	3.54
		10	8.96	20	4.81	30	3.44

# 14. Income Payment Option Table (continued)

Options 4, 5 and 6—Monthly Life Income

	Option 4		Option 5	op.ioir o		birthday nearest		o mot paymit			
	Option 4		Option 5		Option 6	·	Option 4		Option 5		Option 6
Age of						Age of					
Option		20 Year	10 Year	5 Year	with	Option		20 Year	10 Year	5 Year	with
Annui-	Life	Guaranteed	Guaranteed	Guaranteed	Refund	Annui-	Life	Guaranteed	Guaranteed	Guarantee	
tant	Income	Period	Period	Period	Period	tant	Income	Period	Period	Period	Period
15	\$1.96	\$1.93	\$1.94	\$1.95							
					\$1.92	65	4.61	4.05	4.49	4.58	3.9
16	1.98	1.95	1.96	1.97	1.94	66	4.76	4.12	4.62	4.73	4.0
17	1.99	1.96	1.97	1.98	1.95	67	4.93	4.19	4.76	4.89	4.2
18	2.01	1.98	1.99	2.00	1.97	68	5.11	4.26	4.91	5.06	4.3
19	2.03	2.00	2.01	2.02	1.99	69	5.30	4.33	5.07	5.24	4.40
20	2.05	2.02	2.03	2.04	2.01	70	5.50	4.39	5.23	5.44	4.49
21	2.07	2.04	2.05	2.06	2.03	71	5.72	4.44	5.39	5.64	4.6
22	2.09	2.06	2.07	2.08	2.05					5.04	4.0
			2.07			72	5.95	4.50	5.57	5.86	4.7
23	2.11	2.08	2.09	2.10	2.07	73	6.20	4.54	5.75	6.09	4.91
24	2.13	2.10	2.11	2.12	2.09	74	6.47	4.59	5.93	6.34	4.9 <sup>2</sup> 5.00
25	2.15	2.12	2.13	2.14	2.11	75	6.76	4.63	6.12	6.60	5.38
26	2.17	2.14	2.15	2.16	2.13	76	7.08	4.66	6.31	6.88	5.46
27	2.20	2.17	2.18	2.19	2.16	77	7.41	4.69	6.50		5.40
20						77				7.18	5.62
28	2.22	2.19	2.20	2.21	2.18	78	7.77	4.72	6.70	7.49	5.71
29	2.25	2.22	2.23	2.24	2.21	79	8.16	4.74	6.89	7.82	6.07
30	2.28	2.25	2.26	2.27	2.22	80	8.58	4.75	7.08	8.17	6.25
31	2.30	2.27	2.28	2.29	2.26	81	9.03	4.77	7.27	8.53	6.41
32	2.33	2.30	2.31	2.32	2.29	82	9.51	4.78	7.45	8.91	6.43 6.72
	2.36		2.31	2.02	2.23					0.91	0.72
33		2.33	2.34	2.35	2.31	83	10.04	4.79	7.62	9.30	6.80
34	2.39	2.36	2.37	2.38	2.32	84	10.60	4.80	7.78	9.70	6.80 7.28
35	2.43	2.40	2.41	2.42	2.35	85	11.20	4.80	7.93	10.12	7.37
36	2.46	2.43	2.44	2.45	2.42	86	11.84	4.81	8.07	10.54	7.83
37	2.49	2.46	2.47	2.48	2.44	87	12.53	4.81	8.20	10.97	7.86
38	2.53				2.44					10.97	7.00
		2.50	2.51	2.52	2.46	88	13.26	4.81	8.31	11.40	8.18
39	2.57	2.54	2.55	2.56	2.47	89	14.04	4.81	8.42	11.82	8.50
40	2.61	2.58	2.59	2.60	2.53	90	14.86	4.81	8.51	12.23	8.73
41	2.65	2.62	2.63	2.64	2.54	91	15.72	4.81	8.59	12.64	9.31
42	2.70	2.67	2.68	2.69	2.59	92	16.62	4.81	8.66	13.04	9.86
43	2.74									13.04	9.00
		2.71	2.72	2.73	2.62	93	17.58	4.81	8.73	13.42	9.96
44	2.79	2.75	2.77	2.78	2.66	94	18.58	4.81	8.78	13.80	10.55
45	2.84	2.80	2.82	2.83	2.69	95	19.64	4.81	8.83	14.17	10.85
46	2.89	2.84	2.87	2.88	2.73	96	20.78	4.81	8.87	14.53	11.28
47	2.94	2.89	2.92	2.93	2.83	87	22.01	4.81	8.90	14.88	11.75
48	3.00	2.94	2.98	2.99	2.87	98	23.37	4.81			40.45
									8.92	15.23	12.15
49	3.06	3.00	3.04	3.05	2.92	99	24.89	4.81	8.94	15.57	12.70
50	3.12	3.05	3.10	3.11	2.97	100	26.64	4.81	8.95	15.89	13.31
51	3.19	3.11	3.17	3.18	3.02	101	28.64	4.81	8.96	16.19	13.98
52	3.26	3.16	3.24	3.25	3.02	102	30.96	4.81	8.96	16.46	14.53
53	3.33	3.22	3.31	3.32	3.13	103	33.66	4.81	8.96		
54	3.41	3.28	3.38	3.40	3.19	104	36.81	4.81		16.70	15.34
54	3.41	5.20	3.30	3.40	3, 19	104	30.01	4.01	8.96	16.89	16.25
55	3.49	3.35	3.46	3.48	3.25	105	40.50	4.81	8.96	17.04	16.40
56	3.57	3.41	3.54	3.56	3.31	106	44.83	4.81	8.96	17.14	16.50
57	3.66	3.48	3.62	3.65	3.35	107	49.94	4.81	8.96	17.21	16.57
58	3.75	3.55	3.71	3.75	3.38	108	55.99	4.81	8.96	17.26	16.62
59	3.86	3.62	3.81	3.84	3.52	109	63.19	4.81	8.96	17.28	16.64
0.0											
60 61	3.96 4.08	3.6 <del>9</del> 3.76	3.91 4.01	3.95 4.06	3.60 3.68	110	71.79	4.81	8.96	17.28	16. <del>6</del> 6
62	4.20	3.83	4.12	4.18	3.76						
63	4.32	3.91	4.24	4.30	3.83						
64	4.46	3.98	4.36	4.44	3.86						

## 14. Income Payment Option Table (continued)

#### Option 7---Joint and Survivor Monthly Life Income

The amount of income will be based on the ages of the option annuitants on their respective birthdays nearest the date of the first payment. The table shows income for certain ages for one male and one female option annuitant. The amount is shown under the age of the male and opposite the age of the female. Amounts of income for other combinations of ages or for option annuitants of the same sex will be furnished upon request.

Age of Second		Age of Fi	rst Optior	n Annuita	ant								
Option Annuitant	50	55	60	65	70	75	80	85	90	95	100	105	110
50	\$2.72	\$2.83	\$2.92	\$2.99	\$3.04	\$3.07	\$3.10	\$3.11	\$3.11	\$3.00	\$3,00	\$3.00	\$3.00
55	2.83	2.99	3.13	3.25	3.33	3.39	3.43	3.46	3.47	3.33	3.33	3.34	3.34
60	2.92	3.13	3.33	3.52	3.67	3.78	3.86	3.90	3.93	3.76	3.77	3.77	3.77
65	2.99	3.25	3.52	3.79	4.04	4.24	4.39	4.48	4.54	4.34	4.35	4.36	4.37
70	3.04	3.33	3.67	4.04	4.41	4.75	5.02	5.22	5.34	5.13	5.16	5.18	5.19
75	3.07	3.39	3.78	4.24	4.75	5.27	5.75	6.13	6.39	6.24	6.31	6.36	6.38
80	3.10	3.43	3.86	4.39	5.02	5.75	6.50	7.17	7.70	7.75	7.95	8.07	8.14
85	3.11	3.46	3.90	4.48	5.22	6.13	7.17	8.25	9.19	9.70	10.19	10.54	10.72
90	3.11	3.47	3.93	4.54	5.34	6.39	7.70	9.19	10.68	11.89	12.95	13.82	14.34
95	3.24	3.62	4.12	4.80	5.69	6.86	8.35	10.12	12.03	13.93	15.80	17.56	18.77
100	3.24	3.63	4.14	4.82	5.75	7.00	8.64	10.73	13.20	15.88	18.87	22.12	24.70
105	3.24	3.63	4.14	4.84	5.79	7.09	8.86	11.22	14.23	17.86	22.51	28.80	35.26
110	3.24	3.63	4.15	4.85	5.81	7.13	8.97	11.50	14.89	19.30	25.63	36.41	52.85

## **Additional Policy Specifications**

Table of Guaranteed Maximum Monthly Expense Charges per \$1,000 of Specified Amount

ISSUE	BASE COVERAGE
AGE	CHARGE
35	0.308
36	0.309
37	0.309
38	0.310
39	0.310
40	0.311
41	0.311
42	0.311
43	0.312
44	0.312
45	0.313
46	0.314
47	0.315
48	0.316
49	0.316
50	0.316
51	0.317
52	0.318
53	0.319
54	0.339
55	0.340
57	0.341
58	0.342
59	0.344
60	0.345
61	0.347
62	0.348
63	0.347
64	0.348
65	0.350
66	0.351
67	0.361
68	0.364
69	0.367
70	0.370
71	0.373
72	0.378
73	0.383
74	0.398
75	0.408

Table of Guaranteed Maximum Monthly Expense Charges per \$1,000 of Specified Amount

ISSUE	BASE COVERAGE
AGE	CHARGE
76	0.424
77	0.449
78	0.496
79	0.628
80	0.760
81	0.893
82	1.025
83	1.157
84	1.289
85	1.421

TABLE OF GUARANTEED MAXIMUM MONTHLY COST OF INSURANCE RATES PER \$1,000

ATTAINED	BASE COVERAGE
AGE	RATES
35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 55 57 58 60 61 62 63 64 66 66 67 67 71 72 73 74 75 76	0.0875 0.0925 0.0975 0.1042 0.1100 0.1175 0.1267 0.1375 0.1509 0.1659 0.1659 0.1842 0.2009 0.2209 0.2334 0.2484 0.2684 0.2918 0.3218 0.3551 0.3960 0.4452 0.4961 0.5503 0.5995 0.6538 0.7180 0.7956 0.8883 0.7180 0.7956 0.8883 0.9918 1.1004 1.2156 1.3334 1.4546 1.5858 1.7221 1.8852 2.0684 2.3045 2.5532 2.8162 3.1038 3.4175

TABLE OF GUARANTEED MAXIMUM MONTHLY COST OF INSURANCE RATES PER \$1,000

ATTAINED	BASE COVERAGE
AGE	RATES
77 78 79 80 81 82 83 84 85 86 87 88 99 101 102 103 104 105 106 107 108 109 110 1112 113 114 115 116 117 118 119 120	3.7775 4.1950 4.6717 5.1901 5.7951 6.4311 7.1051 7.8478 8.6746 9.5529 10.5646 11.6363 12.7582 13.8800 14.7786 15.8137 17.0207 18.3999 19.9936 21.4983 23.1138 23.9886 25.2309 26.8293 28.3499 30.0774 32.0379 34.2563 36.7251 39.3435 42.1036 44.9566 47.9782 51.1250 54.2398 57.3423 60.2927 64.2100 67.9891 71.9579 76.3104 80.4912 83.3333 83.3333

Table of Death Benefit Factors

Attained Age	Factor
0-40	2.500
41	2.430
42	2.360
43	2.290
44	2.220
45	2.150
46	2.090
47	2.030
48	1.970
49	1.910
50	1.850
51	1.780
52	1.710
53	1.640
54	1.570
55	1.500
56	1.460
57	1.420
58	1.380
59	1.340
60	1.300
61	1.280
62	1.260
63	1.240
64	1.220
65	1.200
66 67 68 69 70 71 72 73 74 75-90	1.190 1.180 1.170 1.160 1.150 1.130 1.110 1.090 1.070
91	1.040
92	1.030
93	1.020
94	1.010
95	1.010
96-121	1.001

TABLE OF NO-LAPSE PERCENT OF PREMIUM CHARGE

POLICY YEAR	PERCENT OF PREMIUM CHARGE
20 21+	7 0

TABLE OF MONTHLY NO-LAPSE COST OF INSURANCE RATES Per \$1000

POLICY YEAR	RATES	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 38 38 38 38 38 38 38 38 38 38 38 38	0.0777 0.0871 0.0975 0.1092 0.1224 0.1334 0.1454 0.1586 0.1729 0.1885 0.2055 0.2240 0.2443 0.2663 0.2904 0.3137 0.3389 0.3661 0.3956 0.4274 0.5013 0.5963 0.6504 0.7095 0.7739 0.8443 0.9211 1.0050 1.1856 1.2819 1.3862 1.4991 1.6214 1.7704 1.9334 2.1119 2.3072 2.5211 2.7555 3.2944 3.6037	

TABLE OF MONTHLY NO-LAPSE COST OF INSURANCE RATES Per \$1000

POLICY YEAR	RATES
45 46	3.9434 4.3167
47	4.7272
48 49	5.1791 5.6770
50	6.2261
51 52	6.8324 7.5027
53	8.2447 9.0675
54 55	9.9813
56 57	10.6568
58	12.1663
59 60	13.0102 13.9212
61	14.5755
62 63	15.2653 15.9931
64	16.7615
65 66	17.5733 18.4317
67	19.3401
68 69	20.3022 21.3221
70 71	22.4043 23.5537
72	24.7760
73 74	26.0772 27.4640
75	28.9442
76 77	30.5260 32.2192
78	34.0343
79 80	35.9835 38.0806
81	40.3412
82 83	42.7833 45.4275
84 85	48.2978 51.4218
86	51.4218 51.4218
	L

NO-LAPSE TIER GROWTH PERCENTAGE TABLE OF MONTHLY NO-LAPSE INTEREST RATES (ATTAINED AGES 90 AND BELOW) POLICY YEAR 1 **INTEREST** AMOUNT OF NO-LAPSE ACCOUNT BALANCE RATE TIER 1: FIRST \$5,000 1.06086% TIER 2: NEXT \$10,000 0.68215% TIER 3: NEXT \$50,000 0.48676% TIER 4: REMAINDER OF NO-LAPSE ACCOUNT BALANCE 0.34344% POLICY YEARS AFTER YEAR 1 **INTEREST** AMOUNT OF NO-LAPSE ACCOUNT BALANCE **RATE** 1.06086% TIER 1: FIRST [\$5,000 increased by No-Lapse Tier Growth Percentage each year] TIER 2: NEXT [\$10,000 increased by No-Lapse Tier Growth Percentage each year] 0.68215% TIER 3: NEXT [\$50,000 increased by No-Lapse Tier Growth Percentage each year] 0.48676% TIER 4: REMAINDER OF NO-LAPSE ACCOUNT BALANCE 0.34344% TABLE OF MONTHLY NO-LAPSE INTEREST RATES (ATTAINED AGES 91 AND ABOVE) POLICY YEAR 1 **INTEREST** AMOUNT OF NO-LAPSE ACCOUNT BALANCE RATE 1.14381% TIER 1: FIRST \$5.000 TIER 2: NEXT \$10,000 0.76510% 0.56971% TIER 3: NEXT \$50,000 TIER 4: REMAINDER OF NO-LAPSE ACCOUNT BALANCE 0.42639% **INTEREST** POLICY YEARS AFTER YEAR 1 AMOUNT OF NO-LAPSE ACCOUNT BALANCE RATE TIER 1: FIRST [\$5,000 increased by No-Lapse Tier Growth Percentage each year] 1.14381% TIER 2: NEXT [\$10,000 increased by No-Lapse Tier Growth Percentage each year] 0.76510% TIER 3: NEXT [\$50,000 increased by No-Lapse Tier Growth Percentage each year] 0.56971% TIER 4: REMAINDER OF NO-LAPSE ACCOUNT BALANCE 0.42639%

To obtain any of the benefits under this policy, write to the Company at its Home Office or to its nearest agent.

Please notify the Company promptly of any change in address.

**Annual Election -** Penn Mutual is a mutual life insurance company. It has no stockholders. The Owner of this policy is a member of Penn Mutual while this policy is in force during the life of the Insured and before surrender of this policy. Members have the right to vote in person or by proxy at the annual election of Trustees held at the Home Office, on the first Tuesday of March. If more information is desired, it may be obtained from the Secretary.

Policyholder Service Office of Company Address

The Penn Mutual Life Insurance Company Mail Code C2L, Philadelphia, PA 19172 Telephone # 1-800-523-0650

Name of Agent	
Address	
Telephone #	

If we at the Penn Mutual Life Insurance Company fail to provide you with reasonable and adequate service, you should feel free to contact:

Arkansas Insurance Department Consumer Services Division 400 University Tower Building Little Rock, AR 72204 1-800-852-5494

# Flexible Premium Adjustable Life Insurance Policy



- Death Benefit payable at death prior to Maturity Date
- Maturity Benefit Payable at Maturity Date
- Flexible premiums payable until Maturity Date
- Participating
- Supplemental benefits, if any, listed on Page 3

The Penn Mutual Life Insurance Company, Philadelphia, Pennsylvania 19172
FL-08(U)(AR)

# **Rider - Overloan Protection Benefit Agreement**

The Penn Mutual Life Insurance Company agrees, subject to the provisions of the Policy and this agreement, to provide the Overloan Protection Benefit described below.

This agreement is a part of the Policy to which it is attached. It is subject to all of the provisions of the Policy unless stated otherwise in this agreement.

**Overloan Protection Benefit -** This rider will prevent your policy from lapsing when, on any Monthly Anniversary, the outstanding indebtedness on the policy equals or exceeds (a) multiplied by (b), where:

- (a) is the Cash Surrender Value minus the Monthly Deduction from the previous Monthly Anniversary; and
- (b) is the Specified Loan Percentage shown on the Policy Specifications Page.

If the above occurs, the policy will automatically become paid-up life insurance. The new Specified Amount of the Policy will be equal to the Policy Value, adjusted for a one-time Charge, multiplied by an attained age factor shown in the Table of Death Benefit Factors.

Conditions - This benefit is subject to the following conditions:

- (a) The Insured's attained age is 75 or older;
- (b) The Policy has been in force for a minimum of 15 years; and
- (c) The Amounts that may be withdrawn from the policy without the imposition of federal income tax must be taken as partial surrenders.

**Charges.** The one time Charge for this agreement is applied against the Policy Value when the benefit is exercised. This charge is shown on the Policy Specifications Page.

**Impact of Policy Agreement.** When the benefit described in this agreement is exercised, the following changes will be made to the Policy:

- (a) Interest will continue to be credited to the Policy Value:
- (b) If the Specified Amount does not include the Policy Value, it will be changed to include the Policy Value;
- (c) Any outstanding indebtedness will remain and interest will continue to be applied to the indebtedness and credited to the Policy Loan Account:
- (d) No further Monthly Deductions will be taken;
- (e) No additional premium payments, partial surrenders, or policy loans, or policy loan repayments will be allowed;
- (f) No further changes can be made to the policy;
- (g) All Supplemental Agreements attached to this policy will be terminated;
- (h) The new Death Benefit upon the date of death of the insured will be the greater of (i) or (ii), where:
  - (i) The Specified Amount of the paid-up life insurance; or
  - (ii) The appropriate attained age factor shown on the Policy Specifications Page multiplied by the greater of the Policy Value or the outstanding indebtedness.

#### Termination of Agreement. This agreement will terminate upon:

- (a) Lapse, surrender, or maturity of this policy; or
- (b) Date of death of the Insured; or
- (c) Date of a policy loan that causes outstanding indebtedness which equals or exceeds (i) multiplied by (ii) where:
  - (i) is the Cash Surrender Value minus the Monthly Deduction from the previous Monthly Anniversary; and
  - (ii) is the Specified Loan Percentage shown on the Policy Specifications Page; or
- (d) the Monthly Anniversary which coincides with or next follows receipt by the Company of a written request to terminate this agreement.

OPBA-08

# Rider - Overloan Protection Benefit Agreement (continued)

**Effective Date.** The effective date of this agreement is the same as the Date of Issue of this Policy unless another effective date is shown below.

The Penn Mutual Life Insurance Company

Chairman and

Chief Executive Officer

SERFF Tracking Number: PNMU-125593294 State: Arkansas

Filing Company: Penn Mutual Life Insurance Company State Tracking Number: 38712

Company Tracking Number: FL-08(S)(AR), ETC.

TOI: L091 Individual Life - Flexible Premium Sub-TOI: L091.001 Single Life

Adjustable Life

Product Name: Flexible Premium Adjustable Kife

Project Name/Number: FL-08(S)(AR), etc. /FL-08(S)(AR), etc.

#### **Rate Information**

Rate data does NOT apply to filing.

SERFF Tracking Number: PNMU-125593294 State: Arkansas
Filing Company: Penn Mutual Life Insurance Company State Tracking Number: 38712

J. .....

 $Company \ Tracking \ Number: \qquad FL-08(S)(AR), \ ETC.$ 

TOI: L091 Individual Life - Flexible Premium Sub-TOI: L091.001 Single Life

Adjustable Life

Product Name: Flexible Premium Adjustable Kife

Project Name/Number: FL-08(S)(AR), etc. /FL-08(S)(AR), etc.

#### **Supporting Document Schedules**

Review Status:

Satisfied -Name: Certification/Notice 04/03/2008

Comments: Attachments:

FleshTestCert-AR.pdf Compliance Cert 1.pdf Compliancy Cert 2.pdf

Review Status:

Satisfied -Name: Application 04/03/2008

Comments: Attachment:

John Doe Application.pdf

Review Status:

Bypassed -Name: Health - Actuarial Justification 04/03/2008

Bypass Reason: N/A

**Comments:** 

Review Status:

Bypassed -Name: Outline of Coverage 04/03/2008

Bypass Reason: N/A

Comments:

Review Status:

Satisfied -Name: Actuary Memorandums 04/15/2008

Comments: Attachments:

Act Memo - FL-08(S).pdf

Act Memo - FL-08(U).pdf

Act Memo - Rider OPBA-08.pdf

SERFF Tracking Number: PNMU-125593294 State: Arkansas

Filing Company: Penn Mutual Life Insurance Company State Tracking Number: 38712

Company Tracking Number: FL-08(S)(AR), ETC.

TOI: L091 Individual Life - Flexible Premium Sub-TOI: L091.001 Single Life

Adjustable Life

Product Name: Flexible Premium Adjustable Kife

Project Name/Number: FL-08(S)(AR), etc. /FL-08(S)(AR), etc.

Illustrative Values for FL-08(S).pdf Illustrative Values for FL-08(U).pdf

SERFF Tracking Number: PNMU-125593294 State: Arkansas

Filing Company: Penn Mutual Life Insurance Company State Tracking Number: 38712

Company Tracking Number: FL-08(S)(AR), ETC.

TOI: L091 Individual Life - Flexible Premium Sub-TOI: L091.001 Single Life

Adjustable Life

Product Name: Flexible Premium Adjustable Kife

Project Name/Number: FL-08(S)(AR), etc. /FL-08(S)(AR), etc.

**Review Status:** 

Satisfied -Name: NAIC Transmittal 04/15/2008

Comments:

Attachment:

NAICTransmitAR.pdf

**Review Status:** 

Satisfied -Name: Stmt of Variability 04/15/2008

Comments: Attachment:

Stmt of Var - FL-08(S), etc..pdf

#### The Penn Mutual Life Insurance Company

#### **CERTIFICATION**

"This is to certify that the form listed below is in compliance with the requirements of Ark. Stat. Ann. 66-3251 through 66-3258, cited as the Life and Disability Insurance Policy Language Simplification Act."

Form No.	<u>Title</u>	Flesch Score
FL-08(S)(AR)	Flexible Premium Adjustable Life Insurance Policy	50.2
FL-08(U)(AR)	Flexible Premium Adjustable Life Insurance Policy	50.1
OPBA-08	Rider-Overloan Protection Benefit Agreement	53.0

Nancy A. Yannuzzi

Senior Manager of Policy Forms

April 14, 2008

#### Arkansas Certification of Compliance Penn Mutual Life Insurance Company

We confirm that we are in compliance with Ark. Code Ann 23-79-138 in that each policy issued shall be accompanied by complete address, telephone number, 800 number of our policyholder's service office; the name, address and telephone number of the soliciting agent; and the address, telephone number and 800 number of the state insurance department.

We confirm that we are in compliance with Regulation 49 in that a guaranty fund notice will be given to each policy owner.

We certify that we are in compliance with Regulation 19 subsection 10B in that our filing meets the provisions of this rule as well as applicable requirements of the department.

We confirm that we are in compliance with Regulation 33 Article XI regarding agents' qualifications to sell variable life insurance.

The Penn Mutual Life Insurance Company was approved for the issuance of variable contracts as required by Regulation 33 Article III 1(b) on February 28, 1969.

#### **CERTIFICATE OF COMPLIANCE**

### Arkansas Insurance Department Rule and Regulation 34 - "Universal Life Insurance"

Form Number (s) to which this certification applies:

Form No. FL-08(S)(AR), FL-08(U)(AR), OPBA-08

I certify that I have reviewed the form(s) listed above, submitted with this Certificate, and to the best of my knowledge and ability, find that said form(s) complies with Section 6 and 7 (Valuation and Nonforfeiture) of Regulation No. 34.

I further certify that when calculating the Reserves under the minimum reserves method in Regulation No. 34, in no case will the Reserves be less than the Actual Cash Surrender Values provided for under the policy contract.

THE PENN MUTUAL LIFE INSURANCE COMPANY

Raymond G. Caucci, FSA, MAAA

Vice President & Life Product Actuary

April 14, 2008

CHECK BOX OF APPLICABLE COMPANY The Penn Mutual Life Insurance Company Philadelphia, PA 19172 **Application for Life Insurance** The Penn Insurance and Annuity Company PART 1 Philadelphia, PA 19172 1. Name of First Insured (First, Middle, Last PROPOSED 3. Date of Birth INSURED 1 X Male ☐ Female 6. Citizen of (Country) 5. Birth Place 7. For Non-US citizen Visa # and Type (attach copy) 10. Marital Status 11. Home Phone No. MM □D □S □W 13. Occupation (include duties) 501e 14. Employer 15. How Long 16. Area Code and Business Phone No. 17. Street City State Zip 1. Name of Second Insured (First, 2. Sex **PROPOSED INSURED 2** ☐ Male ☐ Female 4. Social Security No. 5. Birth Place 6. Citizen of (Country) 7. For Non-US citizen Visa # and Type (attach copy) Complete for ☐ Survivorship 8. Residence: Street City State Zip Additional Insured Rider 9. Years at this Address 10. Marital Status 11, Home Phone No. 12. Drivers License State and No. For Children's Rider, complete form PM5023 13. Relationship to First Insured 14. Occupation (include duties) If info for PI 1 is same as PI 2 indicate same. 15. Employer 16. How Long 17. Area Code and Business Phone No. 18. Street State Zip PLAN OF 2. Term Rider Name **INSURANCE** ustable DEATH BENEFIT \$ DEATH BENEFIT OPTION 6. Check One ☐ Level Death Benefit ☐ Increasing Death Benefit (UL and VUL only) 7. Check One PREMIUM TEST Guideline Premium Cash Value (UL and VUL only) **ADDITIONAL** 1. Universal Life Plans 2. Traditional / Term Plans BENEFITS **AND RIDERS** ☐ Disability Waiver of Monthly Deductions ☐ Guaranteed Premium Benefit Disability Completion Benefit and Disability Option to Purchase Add'l Ins. \$ Waiver of Monthly Deductions Accidental Death Benefit \$ Term Waiver of Premium (choose below)

Accidental Death Benefit

Other

☐ Guaranteed Increase Option \$

☐ Guaranteed Continuation of Policy

☐ Extended No Lapse Guarantee

Option to Extend Maturity Rider

 $\mathbf{z}_{\mathrm{iL}_i}$ 

Option B

Option A

Other \_

Other

Whole Life Waiver of Premium

Automatic Premium Loan Yes

E. DIVIDEND	Universal Life	Traditional Plans								
OPTIONS	☐ Cash	☐ Cash	☐ Accumulate at Interest							
· · · · · · · · · · · · · · · · · · ·	Credited to Cash Value	☐ Paid-up Additions	☐ Other							
		☐ Premium Reduction								
		(Not available with Penn C	heck or Salary Allotment)							
F. PREMIUM	1. Was Money collected with the Application?									
	Yes	Number of Months	(UL only)							
	(if "Yes" submit Temporary Insurance Agree	ement)								
		,								
	2. Billing Method									
	☐ Regular									
	I _	count no.								
		count no.								
	Billing Mode ☐ Single ★Annual ☐ Se	mi-annual □Quarterly □Month	ly (Penn Check and Salary Allotment only)							
	Billing Premium 1171.51									
	Initial Additional Premium Deposit 1035X  Other									
	The state of the s									
	3. ADPUA									
	4. Will any part of the premium be paid from funds that are borrowed or otherwise financed? ☐ Yes X No									
	•									
	If "Yes" details									
C DENNIOUEOK	1. Bank Name	2 Bank Bouting	and Account No.							
G. PENN CHECK ACCOUNT	1. Bank realite	Z. Dank Houting	and Account No.							
INFORMATION	3. Account Type		4. Draw Date:							
Complete only if Penn Check mode is	☐ Checking ☐ Savings ☐ Pers	hing	□1st □8th □15th □22nd							
selected and this is a	5. Bank Address (Street, City, County, State, Zip)									
new account. Also attach a Void Check										
	6. Name (First, Middle, Last) of First Depositor	7. Name (First, Midd	le, Last) of Second Depositor							
H. OWNER	1. Name(s) (First, Middle, Last) of Owner(s) or	Complete Name of Entity	Relationship to Proposed Insured							
1-9: Complete <b>only</b> if Owner is other than										
Proposed Insured 1. If Trust, give name of	3. Address (Street, City, County, State, Zip)									
Trust, Trustee and date of Trust										
10-12: Complete	4. Date of Birth 5. Soc. Sec. # / Tax		7. Name of Trustee							
requested information.	8. Date of Trust 9. Occupa	tion (								
Note: If Owner is a	8. Date of Trust 9. Occupa	UOH								
Trust or Insured's business <u>omit</u>	10. Household Net Income 11. Tax Br	acket 12. Liquid Net Worth	(Exclude Primary Residence)							
questions 4, 9, 10, 11, 12.	10. Household Net Income 11. Tax Bracket 12. Liquid Net Worth (Exclude Primary Residence) %									

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#### 1. Prior Investment Experience (check one only) I. SUITABILITY None - No investment experience. Previous holdings were generally limited to bank savings accounts and CD's This section must be completed for the Average - Invests in securities on an infrequent basis. Has 1-2 years experience investing in securities. Owner and is to be Has a general knowledge of the risks and rewards of investing in securities. completed for all business as stated Above Average - Invests in securities on a frequent basis. Has a number of years experience investing in securities. below. Has a general knowledge of the risks and rewards of investing in securities. For HTK Active - Invests in securities on a frequent basis. Has a number of years experience investing in securities. Producers: Has extensive knowledge of the risks and rewards of investing in securities. Complete this section for all Traditional Life 2. Primary Source of Funds (for this transaction, check one only) Plans. For Variable Life Plans, complete the Current Income Rollover from pension/retirement fund HTK Account Agreement in lieu of Gift/Inheritance Proceeds from sale of stocks or bonds this section. Proceeds from sale of mutual funds Policy Values from existing life/annuity contract For Non-HTK Savings Surrender of life insurance/annuity contract Producers: This section must be Other Personal Loan completed for both Traditional Plans as well 3. Financial Needs/Benefits (check all that apply) as Variable Life Plans. Death Benefit/Enhanced Death Benefit Savings, Accumulation Asset Rebalancing Diversification of Investments Retirement Funding Education/College Funding Estate Planning **Business Purposes** Tax Deferral/Tax Advantage Annuitization Options **Debt Protection** Current Income Charitable Giving Other 4. Risk Profile (Variable Life only, check one only) Conservative-Accepts a low return potential. Maintain a low degree of risk Moderate-Accepts fair degree of risk including lack of liquidity, in order to pursue the potential for a modest return Aggressive-Accepts high degree of risk, including a limited loss of principal, in order to pursue the potential for a higher return Very Aggressive-Accepts maximum degree of risk, including total loss of principal, in order to pursue the maximum possible return 5. Primary Investment Objective (Variable Life only, check one only) Safety of Principal -Preservation of investment Principal Income-Regular, current income stream. May need investment principal within next five years. Growth and Income-Moderate growth. Current Income Stream. May need investment principal within next five vears Growth-Grow assets moderately or slightly above rate of inflation. Will not need investment principal for at least ten years Aggressive Growth-Desire to grow assets substantially. Will not need investment principal for at least ten years. Reinvestment of income Speculation-Grow assets substantially In short time frame, Higher than average possibility of total loss of principal. Will not need investment principal for at least ten years

J. PAYOR	1. Name(s) (First, Middle, Last) of Payor(s)	[ 2	2. Relationship	to Proposed Insured				
Complete only if Payor is other than the Proposed Insured or								
Owner or if a different address is requested.	3. Address: (Street, City, State, Zip)							
If Payor is a trust or Insured's business, omit questions 5, 6	4. Mailing Address (if different from above): (Street, City, State,	Zip)						
and 7.	5. Occupation 6. Ar	nnual earned income	from occupation	on				
	7. Other Income & Source		8. Soc. Sec	# or Tax ID #				
K. PRIMARY BENEFICIARY	1. Name of Primary Beneficiary(ies). (If Trust, give Name, Date of Sarah Aun Penn	f Trust and Name of	Trustee)					
Note: If no beneficiary survives the insured, proceeds revert to the Estate of the Insured.	Juney Ann John							
estate of the msured.	-							
	2. Relationship to Proposed Insured SPOUSE		3. Soc. Sec # or Tax ID # 987 – 65 – 432 /					
L. CONTINGENT BENEFICIARY	Name of Contingent Beneficiary							
	2. Relationship to Proposed Insured		3. Soc. Sec	# or Tax ID #				
M. RIDER BENEFICIARY	1. Name of Rider Beneficiary		NO. 00 10 10 10 10 10 10 10 10 10 10 10 10					
f no beneficiery is named or survives nsured, proceeds revert to the owner.	2. Relationship to Proposed Insured	3. Soc. Sec	3. Soc. Sec # or Tax ID #					
N. LIFE		Propos	ed Insured 1	Proposed Insured 2				
INSURANCE IN FORCE OR PENDING	Have you ever applied for life, health or disability insurance and been declined, postponed or charged an increased premi	ium?	ES 🛛 NO	YES NO				
	Do you have any applications pending with any other life insu company now?	rance $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	es Xno	□YES □NO				
	Have you been involved in any discussion about the possible assignment of this policy to a Life Settlement, Viatical or other secondary market provider?	sale or r \ \ \ \ \ Y	ES XNO	□YES □NO				
	4. Have you in the past 2 years sold a policy to a Life Settlement or other secondary market provider?	ES XINO	□YES □NO					
	If answered "Yes" to above questions, please give details for each	ch Proposed Insured	, t					
	Proposed Insured 1		······································					
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
	Proposed Insured 2							

		The first the second of the first terminal to the second of the second o			***				
N. LIFE INSURANCE	5. List all Insurance In For	ce on any Proposed	l insured. <b>If</b> r	ione, check this	box.	Is this Policy being			
IN FORCE OR PENDING (continued)	Insured's Name & Compan	ıy	Face Policy Amount Number			Replaced or Changed?	Check if 1035 Exchange		
(dominaca)						□Yes□No			
						☐ Yes ☐ No	4		
•						☐ Yes ☐ No			
						☐ Yes ☐ No			
						☐ Yes ☐ No			
O. REPLACEMENT AND 1035 EXCHANGE INFORMATION	1. a) Are you considering stopping premium payments, surrendering, replacing, forfeiting, assigning to the insurer or reducing your benefits under an existing policy or contract?								
P. TOBACCO	Has any person proposed for coverage <b>ever</b> used     tobacco or nicotine products in any form?								
AND/OR NICOTINE USE	tobacco of nicotine pro		er used		Yes 💢	No 🗆 Yes 🗆 No			
	2. If "Yes": PI1	Type		Frequency		Date Last Used			
	PI2	Type		Frequency		Date Last Used			
Q. PERSONAL INFORMATION  Complete for all Proposed Insureds  Provide details to any yes answers in the "Details" section	1. Annual earned income 2. Other income (State s 3. Net Worth 4. Has any Proposed Ins Declared Bankruptcy  Details	source in "Details")	ruptcy? (If "Y Discha	'es" has it been d arged YES □ N	ischarge		\$ \$ ge)		

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	-											
Q. PERSONAL INFORMATION					<b>ท</b> 1		1 2					
Complete for all	5.	Does any Proposed Insured intend to reside or travel outs United States within the next 24 months? (If "Yes" complete		YES	NO X	YES	NO					
Proposed Insureds.  Provide details to any	6.	foreign travel questionnaire) Is any Proposed Insured a member, or intending to become	ne a		×							
yes answers in "Details" Section	7.	member, of any armed forces or military reserve?  Within the past three years, has any Proposed Insured:										
		<ul> <li>(a) Flown or taken instruction as a pilot or crew member of to do so? (If "Yes", complete Aviation Supplement)</li> <li>(b) Engaged in any kind of racing, scuba or sky diving, har</li> </ul>			X							
		rock climbing, or other hazardous avocation or intend to (If "Yes", complete appropriate questionnaire)  (c) Been convicted of a moving violation or had their driver	o do so?		×							
		''s		×								
	8.	Has any Proposed Insured ever: <ul> <li>(a) Used amphetamines, barbiturates, hallucinogens, mariji narcotics, or other controlled substances, except as prephysician?</li> </ul>			X							
		(b) Been counseled or treated for use of alcohol or drugs?			X							
	9.	Within the past ten years, has any Proposed Insured been of a felony?	convicted		×							
	se, Huntington		$\bowtie$									
	Det	ails										
	- Courto - C											
				<del></del>		Committee of the Control of the Cont	er mangamang ant may pag sapring merilikan yan enga g sebi an					
R. PERSONAL PHYSICIAN		ne and address of Personal Physician(s): GIVE DATE AN o personal physician, list physician last consulted, date and			ED.							
	1, P M	roposed Insured 1: Physician Name IChAEI TMES	2. Phone No. 415 ) 956-1		3. Date L	ast Seer	-					
		4. Address: (Street, City, State, Zip)  99 Bird St., Horsham PA 19044										
	5. H	eason Last Seen: Routine Physical										
	6. P	roposed Insured 2: Physician Name	7. Phone No.		8. Date L	ast Seer	l					
	9. A	ddress: (Street, City, State, Zip)		***************************************		and the second s						
	10.	10. Reason Last Seen:										

PM1143

S. MEDICAL HISTORY			Proposed Insured 1				Proposed Insured 2			
Complete for all	1. Height (in shoe	es)	5 ft. // in.				ft.	in	l.	
Proposed Insureds.	2. Weight (clothe	d)						lbs.		
Provide details to any yes answers in	3. Weight change	in last year?	Yes		No_	X	Yes		No	
"Details" Section	If "Yes":		No. of lbs.	F	Reason:		No. of lbs		Reason:	
	4. Birth weight if	under 6 mo. old				lbs.		· · · · · · · · · · · · · · · · · · ·	lb	S.
			I	* · · · · · · · · · · · · · · · · · · ·			PI	1	Р	12
	5. Are you prese If yes, provide physician. (if a	full details includ	ation either p ling name, d	orescribed osage, and	or over d prescr	the counter? ibing	YES	NO.	YES	NO
	6. Within the pas (a) Consult	t five years, has ted a physician fo liagnostic tests?				ardiogram or	×			
	(b) Been ir	(b) Been in a clinic, hospital or medical facility for observation or treatment?						X		
	(c) Been a		any diagnostic test, hospitalization or surgery					$ \boxtimes $		
	7. Has any Proposed Insured ever been treated for, or been diagnosed with:  (a) Chest pain, high blood pressure, stroke, heart murmur, or other circulatory disorder?							×		
	(b) Cancer, cyst, growth, tumor?							X		
	(c) Anxiety, depression, dizziness, convulsions, epilepsy or any mental or nervous disorder?							X		
	(d) Diabete	(d) Diabetes, thyroid or other glandular disease?								
	(e) Colitis,	or any liver or ga	strointestina	l disorder?	,			×		
	(f) Breast,	prostate or repro	ductive disor	der?				X		
	(g) Kidney,	bladder or other	genitourinar	ry disorder	?			$\bowtie$		
		i, emphysema, ch D.) or other respi			onary d	isease		×		
	(i) An immune deficiency disorder, Acquired Immune Deficiency Syndrome (AIDS), Aids Related Complex (ARC), or tested positive for the HIV virus?						ome 🗌	×		
T. DETAILS FOR MEDICAL HISTORY	Question No. and Letter	Persor	n	Date			nysicians,	hospita	and address	
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No. Dead  1. Proposed Insured 2 Age if State of Amount of Reath Death Death  Father  Mother  Brothers and Sisters  No. Living  No. Dead  Under penalty of perjury, I the owner certify that:  1. The number shown in this application as any social security number or taxpayer identification number is correct, and correct, and correct, and correct and subject to backup withholding because I have not been notified by the IRS that I am subject to backup withholding as a failure to report all interest or dividends, or the IRS has notified me that I am no longer subject to backup withholding, or I am exempt from backup withholding.  3. I am a U.S. person (including a U.S. resident allen)  Check this box if you are subject to backup withholding under section 3406(a)(1)(c) of the Internal Revenue Code.  SPECIAL INSTRUCTIONS  NON-CONFORMING LUSTRATION and the life insurance policy illustration shown to me differs from the policy application I have con understand that if a policy is issued, an illustration conforming to the policy, as issued, will be provided to me for signature no later than at the time the policy is delivered.    Check if applicable	under age 17.										
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Father   Mother   Brothers and Sisters   No. Living   No. Dead   Death   Dea											
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No. Dead		Brothers and Sisters									
Under penalty of perjury, I the owner certify that:  1. The number shown in this application as my social security number or taxpayer identification number is correct, and  2. I am not subject to backup withholding because I have not been notified by the IRS that I am subject to backup withholding as a failure to report all interest or dividends, or the IRS has notified me that I am no longer subject to backup withholding, or I am exempt from backup withholding.  3. I am a U.S. person (including a U.S. resident alien)  Check this box if you are subject to backup withholding under section 3406(a)(1)(c) of the Internal Revenue Code.  SPECIAL INSTRUCTIONS  I acknowledge that the life insurance policy illustration shown to me differs from the policy application I have concerned to the policy and internal at the time the policy is delivered.  Check if applicable  The agent/registered representative may request transfers of account values pursuant to my instruction unless I this box.  Check if applicable  By completing Section G of this application, I authorize monthly payments from my checking account, or from my Pershing Resource Checking or Pro Cash Plus account to the Penn Mutual Life Insurance Company, its subsidiafiliates, third party administrators and reinsurers (herein Company) for premiums on this policy, beginning with periodic payment that comes due under the contract, until such time as a payment cannot be made due to insuffunds or the Company gives the other parties at least 30 days' advance written notice of the termination of such plan. I am able to cancel the payment plan at any time by either calling the Company at 1-800-523-0650 or in w Monthly payments will be drawn from my account on or about the date specified in this application.  I further agree that if any such check be dishonored, whether with or without cause and whether intentionally or		No. Living									
1. The number shown in this application as my social security number or taxpayer identification number is correct, and 2. I am not subject to backup withholding because I have not been notified by the IRS that I am subject to backup withholding as a failure to report all interest or dividends, or the IRS has notified me that I am no longer subject to backup withholding, or I am exempt from backup withholding.  3. I am a U.S. person (including a U.S. resident alien)  Check this box if you are subject to backup withholding under section 3406(a)(1)(c) of the Internal Revenue Code.  SPECIAL INSTRUCTIONS  I acknowledge that the life insurance policy illustration shown to me differs from the policy application I have concompanted in the policy application in the policy application I have concompanted in the policy application in the policy application in the policy application in the polic		No. Dead									
LLUSTRATION ACKNOWLEDGEMENT NON-VARIABLE ONLY)  AUTHORIZATION FOR FUND TRANSFER VARIABLE ONLY)  By completing Section G of this application, I authorize monthly payments from my checking account, or from my Pershing Resource Checking or Pro Cash Plus account to the Penn Mutual Life Insurance Company, its subsidiating affiliates, third party administrators and reinsurers (herein Company) for premiums on this policy, beginning with periodic payment that comes due under the contract, until such time as a payment cannot be made due to insuffunds or the Company gives the other parties at least 30 days' advance written notice of the termination of such plan. I am able to cancel the payment plan at any time by either calling the Company at 1-800-523-0650 or in w Monthly payments will be drawn from my account on or about the date specified in this application.  I further agree that if any such check be dishonored, whether with or without cause and whether intentionally or	OF OWNER'S TAXPAYER ID # SPECIAL	1. The number shown in this correct; and 2. I am not subject to backup backup withholding as a longer subject to backup 3. I am a U.S. person (included)  Check this box if you are	s application p withholding failure to repo withholding, ding a U.S. re	as my social securi because I have no ort all interest or div or I am exempt fror esident alien)	of been notified by the ridends, or the IRS han backup withholding.	IRS that I am s notified me	subject to that I am no				
this box.  Check if applicable  By completing Section G of this application, I authorize monthly payments from my checking account, or from measurements thing the pershing Resource Checking or Pro Cash Plus account to the Penn Mutual Life Insurance Company, its subsiditional affiliates, third party administrators and reinsurers (herein Company) for premiums on this policy, beginning with periodic payment that comes due under the contract, until such time as a payment cannot be made due to insuffunds or the Company gives the other parties at least 30 days' advance written notice of the termination of such plan. I am able to cancel the payment plan at any time by either calling the Company at 1-800-523-0650 or in we Monthly payments will be drawn from my account on or about the date specified in this application.  I further agree that if any such check be dishonored, whether with or without cause and whether intentionally or	LLUSTRATION ACKNOWLEDGEMENT	I understand that if a policy is is signature no later than at the tire	ssued, an illu	stration conforming							
Pershing Resource Checking or Pro Cash Plus account to the Penn Mutual Life Insurance Company, its subsidit affiliates, third party administrators and reinsurers (herein Company) for premiums on this policy, beginning with periodic payment that comes due under the contract, until such time as a payment cannot be made due to insuffunds or the Company gives the other parties at least 30 days' advance written notice of the termination of such plan. I am able to cancel the payment plan at any time by either calling the Company at 1-800-523-0650 or in w Monthly payments will be drawn from my account on or about the date specified in this application.  I further agree that if any such check be dishonored, whether with or without cause and whether intentionally or	FOR FUND TRANSFER	this box.									
inadvertently, the Company shall be under no liability whatsoever even though such dishonor results in the forfe insurance.		Pershing Resource Checking or Pro Cash Plus account to the Penn Mutual Life Insurance Company, its subsidiaries, affiliates, third party administrators and reinsurers (herein Company) for premiums on this policy, beginning with the ne periodic payment that comes due under the contract, until such time as a payment cannot be made due to insufficient funds or the Company gives the other parties at least 30 days' advance written notice of the termination of such payment plan. I am able to cancel the payment plan at any time by either calling the Company at 1-800-523-0650 or in writing. Monthly payments will be drawn from my account on or about the date specified in this application.  I further agree that if any such check be dishonored, whether with or without cause and whether intentionally or inadvertently, the Company shall be under no liability whatsoever even though such dishonor results in the forfeiture of									

#### REPRESENTATIONS

I(we), the Proposed Insured(s), or Applicant(s) if Proposed Insured(s) is(are) age 17 or less, represent that the statements and answers in this part I of the application are written as made by me(us) and are complete and true to the best of my (our) knowledge and belief. I(we) the Proposed Insured(s), or the Applicant(s) if other than the Proposed Insured(s) agree that they will be a part of the contract of insurance if issued; that I(we) will be bound by such statements and answers, and that the Company, believing them to betrue, will rely and act upon them. I(we) also understand and agree that:

- Subject to the provisions of the temporary insurance agreement attached to this application, no insurance
  will be in force until the first premium is paid in full and the policy is delivered while the health, habits,
  occupation and other facts relating to the Proposed Insured(s) and to the Payor, if a Payor Benefit is issued,
  are the same as described in this Part I of the application, any Part II required by the Company and any
  amendments or supplements to them.
- Notice to or knowledge of an agent or a medical examiner is not notice to or knowledge of the Company, and no agent or medical examiner is authorized to accept risks, to pass upon acceptability for insurance or to modify any contract of insurance.
- 3. Acceptance of any policy issued based on this application will be a ratification of any amendments or corrections noted by the Company in the space headed "Home Office Amendments and Corrections", except that if required by state statute or regulation, any change in amount, age, plan of insurance, additional benefits or classification must be agreed to in writing.

#### FRAUD WARNING

Applies to all states except those specifically listed.

Any person who knowingly and with intent to defraud any insurance company or other person files an application for insurance or a statement of claim containing any materially false information or conceals for the purpose of misleading information concerning any fact material thereto commits a fraudulent insurance act which is a crime and subjects such person to criminal and civil penalties.

Colorado: It is unlawful to knowingly provide false, incomplete, or misleading facts or information to an insurance company for the purpose of defrauding or attempting to defraud the company. Penalties may include imprisonment, fines, and denial of insurance and civil damages. Any insurance company or agent of an insurance company who knowingly provides false, incomplete, or misleading facts or information to a policyholder or claimant for the purpose of defrauding or attempting to defraud the policyholder or claimant with regard to a settlement or award payable from insurance proceeds shall be reported to the Colorado division of insurance within the department of regulatory agencies.

District of Columbia: WARNING It is a crime to provide false or misleading information to an insurer for the purpose of defrauding the insurer or any other person. Penalties include imprisonment and/or fines. In addition, an insurer may deny insurance benefits if false information materially related to a claim was provided by the applicant.

Florida: Any person who knowingly and with intent to injure, defraud or deceive any insurer files a statement of claim or application containing any false, incomplete, or misleading information is guilty of a felony in the third degree.

Kentucky: Any person who knowingly and with intent to defraud any insurance company or other person files an application for insurance containing any materially false information or conceals for the purpose of misleading information concerning any fact material thereto commits a fraudulent insurance act which is a crime.

Louisiana: Any person who knowingly presents a false or fraudulent claim for payment of a loss or benefit or knowingly presents false information in an application for insurance is guilty of a crime and may be subject to fines and confinement in prison.

Maine & Tennessee: It is a crime to knowingly provide false, incomplete or misleading information to an insurance company for the purposes of defrauding the company. Penalties may include imprisonment, fines or a denial of insurance benefits.

New Jersey: Any person who includes false or misleading information on an application for an insurance policy is subject to criminal and civil penalties.

New Mexico: Any person who knowingly presents a false or fraudulent claim for payment of a loss or benefit or knowingly presents false information in an application for insurance is guilty of a crime and may be subject to civil fines and criminal penalties.

Ohio: Any person who, with the intent to defraud or knowing that he is facilitating a fraud against an insurer, submits an application or files a claim containing a false or deceptive statement is guilty of insurance fraud.

Oklahoma: Any person who knowingly, and with intent to injure, defraud or deceive any insurer, makes any claim for the proceeds for an insurance policy containing any false, incomplete or misleading information is guilty of a felony.

Oregon: Any person who, knowingly and with intent to defraud any insurance company or other person, files an application for insurance or a statement of claim containing any materially false information or conceals for the propose of misleading information concerning any fact material may be guilty of a fraudulent insurance act which is a crime and may subject such person to criminal and civil penalties.

Pennsylvania: Any person who knowingly and with intent to defraud any insurance company or other person files an application for insurance or statement of claim containing any materially false information or conceals for the purpose of misleading, information concerning any fact material thereto commits a fraudulent insurance act, which is a crime and subjects such person to criminal and civil penalties.

Virginia: Any person who, with intent to defraud or knowing that he is facilitating a fraud against an insurer, submit an application or files a claim containing a false or deceptive statement may have violated state law.

Vermont: Any person who, with intent to defraud or knowing that he is facilitating a fraud against an insurer, submits an application or files a claim containing a false or deceptive statement may be proven guilty or fraud.

Washington: Any person who knowingly presents a false or fraudulent claim for payment of a loss or knowingly makes a false statement in an application for insurance may be guilty of a criminal offense under state law.

AUTHORIZATION	l(we),							
Write in names of all Proposed Insureds.	hereby authorize: (a) any physician, health care provider, health plan, medical professional, hospital, clinic, laboratory, pharmacy or other medical or health care facility that has provided payment, treatment or services to me(us) or on my(our) behalf; (b) any insurance company; and, (c) the Medical Information Bureau, Inc. (MIB), to disclose my(our) entire medical record and any other protected health information concerning me(us) to the Underwriting Department of The Penn Mutual Life Insurance Company, its subsidiaries, affiliates, third party administrators and reinsurers (herein Company).							
	I(we) understand that such information may include records relating to my(our) physical or mental condition such as diagnostic tests, physical examination notes, and treatment histories, which may include information regarding the diagnosis and treatment of human immunodeficiency virus (HIV) infection, sexually transmitted diseases, and mental illness, and the use of alcohol, drugs and tobacco, but shall not include psychotherapy notes.							
	I(we) acknowledge that any agreements I(we) have made to restrict my(our) protected health information do not apply to the Authorization, and I(we) instruct any physician, health care professional, hospital, clinic, medical facility or other health care provider to release and disclose my(our) entire medical record without restriction.							
	I(we) understand that this information will be used by the Company to determine eligibility for insurance.							
	I(we) hereby authorize the Company to disclose any information it obtains about me(us) to the Medical Information Bureau, Inc., or any other life insurance company with which I(we) do business. I understand that the Company will not disclose information it obtains about me(us) except as authorized by this Authorization, as may be required or permitted by law, or as I(we) may further authorize. I(we) understand that if information is redisclosed as permitted by this Authorization, it may no longer be protected by applicable federal privacy law.							
	I(we) understand that: (a) this Authorization shall be valid for 24 months from the date I(we) sign it; (b) I(we) may revoke it at any time by providing written notice to the Underwriting Department of the Company subject to the rights of any person who acted in reliance on it prior to receiving notice of its revocation; and (c) my(our) authorized representative and I(we) are entitled to receive a copy of the Authorization upon request and (d) a copy of this Authorization shall be as valid as the original.							
	I(we) acknowledge receiving an MIB, Inc. Notice, a Fair Credit Reporting Act Notice and a Notice of Information Practices and authorize Penn Mutual to obtain an investigative or other consumer report as described in the Fair Credit Reporting Act Notice.							
SIGNATURES	Signed and Dated by the Applicant in:  Philadelphia Pa 4-1-2008							
	City State Month/Day/Year							
	SIGNATURE OF INSURED - OR PARENT IF INSURED IS UNDER THE AGE OF 18							
	x Welliam Joseph Penn x							
	Proposed Insured 1 Proposed Insured 2							
	SIGNATURE OF OWNER AND OR APPLICANT - IF OTHER THAN THE PROPOSED INSURED.							
	x x							
	Owner* Applicant *If a Corporation, the signature and title of any authorized officer other than the Proposed Insured(s) is required and							
	the full name of the corporation must be shown. If a Trust, the signature of the Trustee.							
	SIGNATURE OF PAYOR							
	l x							
	Payor							

AGENTS CERTIFICATION	I certify to the best of my knowledge the answers to the questions in all parts of this application are true and correct. I further certify to the best of my knowledge this policy							
Be sure to check appropriate block.	existing life insurance or annuity polic	y now in force.	irce.					
Each agent present at solicitation must sign.	x Samuel Johnson	X						
, ·	x	Х						
	Agent	Agent						
	XAgent	XAgent						
HOME OFFICE AMENDMENTS AND CORRECTIONS	-		diversity of the second materials of the second property of the seco					
Vot applicable in Pennsylvania.								
	N. P.							

#### PENN MUTUAL LIFE INSURANCE COMPANY

# ACTUARIAL BASIS, CASH VALUE FORMULA DEMONSTRATION OF COMPLIANCE WITH STANDARD NONFORFEITURE LAW DEMONSTRATION OF COMPLIANCE WITH STANDARD VALUATION LAW

#### FLEXIBLE PREMIUM ADJUSTABLE LIFE, FORM FL-08(S)

#### I. DESCRIPTION OF POLICY CHARACTERISTICS

This policy provides adjustable life insurance coverage while the policy remains in force.

#### A. Death Benefits

Insurance on the life of the insured is integrated with the policy value under one of two options.

Under option one, the total death benefit is the Specified Amount on the date of death.

Under option two, the death benefit is defined as the Specified Amount on the date of death plus the policy value on the date of death.

Under either option, should the amount of a defined percentage of the policy value be greater than the death benefit on the date of death, the death benefit will be adjusted automatically to keep the death benefit equal to the defined percentage of the policy value. The defined percentage is that percentage which will continue to qualify the policy as life insurance under Section 7702 of the 1986 Internal Revenue Code. Note that this policy form can qualify for life insurance under either the Guideline Premium Test or the Cash Value Accumulation Test.

#### B. Policy Value

The policy value is the accumulation of interest of a percentage of the net premiums less expense charges and less the cost of insurance based on the net amount of risk.

#### C. <u>Cash Surrender Value</u>

The cash surrender value is the policy value less the surrender charge. A policy is subject to a surrender charge on the initial Specified Amount only during the first fourteen years in force and for fourteen years following an increase in the Specified Amount.

#### D. <u>Continuation of Insurance</u>

If the policyholder ceases paying premiums, the policy will continue in force for as long as the net cash surrender value is sufficient to keep it in force or the No Lapse Guarantee requirement is satisfied. The rates for calculating the Monthly Deductions will be the same as those used while on a premium paying basis.

#### E. No Lapse Guarantee

The policy will not lapse as a result of a Net Cash Surrender Value insufficient to cover the Monthly Deduction for the following month if, on a monthly anniversary prior to the Maturity Date, the No-Lapse Guarantee Requirement is satisfied. The No-Lapse Guarantee Requirement is satisfied if, on a monthly anniversary prior to the Maturity Date, the No-Lapse Guarantee Account less any outstanding indebtedness exceeds zero.

However, failure to satisfy this Requirement does not necessarily lapse the contract, provided the Net Cash Surrender Value is greater than zero.

#### F. Flexibility

At issue the owner selects both a premium amount and the amount of insurance, subject to the minimum amounts. At any time after the first policy year, while the policy is in force, the owner may change the amount of insurance. Decreases may not lower the amount of insurance below the minimum amount. Increases are subject to the rules of Penn Mutual as to age and amount. Evidence of insurability is required for any increase in the amount of insurance. Premiums after the first may be paid in any amount and at any interval subject to the following conditions:

- (1) No premium payment may be less than \$25 or such lower amount that may be established by Penn Mutual.
- (2) Penn Mutual reserves the right to limit total premiums paid in any policy year to the planned payments for that policy year as shown on Page 3 of the Policy.
- (3) If the Guideline Premium Test is used to qualify the policy as life insurance, total premiums paid in any year may not exceed the guideline premium limitation as set forth in Section 7702 of the Internal Revenue Code of 1986.

#### II. BASIS OF VALUES

#### A. Interest

The minimum interest rate that will be used in calculating the Policy Value is .24663% per month compounded monthly. This is equivalent to 3% per year compounded annually. The actual interest that will be credited to the Policy Value will be at rates set by Penn Mutual that could be higher than 3%.

Because of the retrospective approach used for the calculation of policy values, the use of an increased rate of interest in determining policy values would produce increased cash surrender values. Therefore, such use is not in conflict with the maximum interest rate defined in the Standard Nonforfeiture law.

#### B. <u>Cost of Insurance</u>

The guaranteed maximum cost of insurance rates applied in the calculation of policy values under this policy are the 2001 CSO Smoker and Nonsmoker Mortality Table, Age Nearest Birthday.

The company may use modified cost of insurance rates which produce a lower cost of insurance, thus producing higher cash surrender values than those generated by the guaranteed maximum rates.

#### C. Expense Charges

The maximum expense charges applicable under this policy are:

- (a) a percent of premium charge of 15% of each premium paid;
- (b) a monthly expense charge of \$9.00;
- (c) a monthly expense charge per \$1,000 of original Specified Amount that varies by issue age for the first 120 months following the date of issue; and
- (d) if the Specified Amount has been increased within the past year, a monthly expense charge per \$1,000 of the increased Specified Amount that varies by the age at the time of increase for the first 120 months following the date of increase.
- D. The same basis of values applies whether premiums are being paid or the policyholder has ceased to pay premiums.

## III. POLICY VALUE FORMULA AND COMPARISON OF FLEXIBLE PREMIUM ADJUSTABLE LIFE CASH SURRENDER VALUES WITH MINIMUM NONFORFEITURE REQUIREMENTS

For Flexible Premium Adjustable Life (FPAL) the ultimate plan of insurance is determined by assuming that the initial premium and death benefit continue unchanged. Since FPAL is a universal life type policy, the initial premium and initial death benefit are those selected by the policyowner at issue, and hence are known.

The Standard Nonforfeiture Law (SNFL) defines minimum policy values using a prospective formula. But the prospective SNFL formula can be mathematically converted to a retrospective form. The method of calculating FPAL policy values was designed to be consistent with the retrospective equivalent of the SNFL cash value formula.

The following section will demonstrate that FPAL cash surrender values are greater than minimum cash values required by the retrospective version of the SNFL formula using the following approach:

- (1) It will be shown that the FPAL policy value formula is consistent with the retrospective equivalent of the formula required by the SNFL.
- (2) Minimum FPAL policy values will be generated by using the minimum interest rate of 3% and maximum cost of insurance rates in the policy value formula. Minimum FPAL cash surrender values are obtained by subtracting the maximum surrender charge from the policy values.

Excess interest and/or lower cost of insurance rates will result in policy values greater than those based on guaranteed cost of insurance and the 3% minimum interest rate.

- (3) It will be shown that the maximum surrender charge for FPAL will, at all times, be less than or equal to the maximum expense allowance permitted by the SNFL.
- (4) The combination of items (1), (2) and (3) above ensures that regardless of the incidence and amount of FPAL premium payments and benefit changes, FPAL cash surrender values will be greater than the minimum SNFL cash values generated by the retrospective equivalent of the SNFL formula.

The following is a definition of terms used in the policy value formulas:

- t = duration from original issue date measured in months.
- i' = monthly interest rate equal to 3% annually, which equals  $(1.03)^{1/12}$  1
- $tq_X = 1/12$  of the appropriate 2001 CSO mortality rate for age x where x is the "age nearest birthday" as of the policy anniversary prior to month t.
- $F_t$  = total death benefit in month t.
- E = Monthly expense charge which equals \$9.00 per policy while the policy remains in force.
- EC = excess of the first-year monthly charge per \$1,000 of original Specified
  Amount over the average (over 19 years) renewal monthly charge per \$1,000 of
  original Specified Amount. The monthly charge per \$1,000 of original
  Specified Amount varies by issue age and extends for the first 120 months
  following the date of issue or the date of an increase.
- Gt = Gross premium collected in month t. All premiums are assumed to be paid monthly at the beginning of each month.
- $P_t$  = Net premium credited to policy values, which equals 85% of  $G_t$ .

 $t^{r}x$  = Maximum monthly cost of insurance rate which equals  ${}_{t}q_{x}/(1{}_{t}q_{x})$  where x is the "age nearest birthday" as of the policy anniversary prior to month t.

 $C_t$  = Maximum monthly cost of insurance for month t.

 $t^{CV}$  = Policy value at end of month t.

tSC = Surrender Charge at end of month t.

tCSV = Cash Surrender Value at end of month t.

The FPAL policy value at time of issue (after receipt of the initial premium) is P. The FPAL policy value at the end of the first month just prior to the payment of the second month's premium is:

(1) 
$${}_{1}CV = (P_{1} - E - EC - C_{1}) * (1 + i')$$

where:

(2) 
$$C_1 = {}_{1}r_x * [\underline{F_1} - P_1] = {}_{1}q_x * [\underline{F_1} - P_1]$$
  
 $(1+i')$   $1 - {}_{1}q_x (1+i')$ 

Substituting (2) into (1), we have:

(3) 
$$_{1}CV = [P_{1} - E - EC - _{1}q_{x} * (F_{1} - P_{1})] * (1 + i')$$
  
 $1 - _{1}q_{x} * (1 + i')$ 

$$= \underbrace{(P_1 - E - EC) * (1 + i') * (1 - _1q_x) - _1q_x * F_1 + _1q_x * P_1 * (1 + i')}_{1 - _1q_x}$$

Collecting terms:

(4) 
$${}_{1}CV = (P_{1})^{*} (1 + i') - {}_{1}q_{x} * F_{1} - (E + EC) * (1+i')$$
  
 $(1 - {}_{1}q_{x})$ 

and the cash surrender value, 1CSV, is given by:

(5) 
$$_{1}CSV = (P_{1})^{*} (1 + i') - _{1}q_{x} * F_{1}$$
 -  $(E + EC) * (1+i') - _{1}SC$   
 $(1 - _{1}q_{x})$ 

Next it is necessary to show that the FPAL cash surrender value formula is consistent with the SNFL formula for calculating minimum cash values.

The first year minimum cash value required by the SNFL is calculated using a prospective formula involving the present value of future benefits less the present value of future adjusted net premiums. This prospective form can be converted into the following retrospective form by using the technique described on page 106 of Life Contingencies by C.W. Jordan.

The notation used for the SNFL minimum cash value formulas is as follows:

i = .03

 $q_{x+t}$  = the appropriate 2001 CSO mortality rate where age x+t is the "age nearest birthday" as of the t'th policy anniversary.

 $P_{t}^{A}$  = adjusted premium in year t.

 $A_0$  = present value of future benefits at time of issue.

PV(P<sup>A</sup><sub>t</sub>)<sub>0</sub> = present value of future adjusted premiums at time of issue.

 $E^1$  = maximum first year expense allowance.

 $_{t}F$  = death benefit in year t.

 ${}_{t}CV^{M}$  = SNFL minimum cash value at end of year t.

The retrospective formula for calculating the minimum cash value as defined by the SNFL, at the end of the first year, is:

$${}_{1}CV^{M} + q_{x} ({}_{1}F - {}_{1}CV^{M}) = ({}_{0}CV^{M} + P^{A}_{1}) (1 + i)$$

(6) 
$${}_{1}CV^{M} = \underline{({}_{0}CV^{M} + P^{A}{}_{1})(1+i) - q_{x} * {}_{1}F}$$
  
 $1 - q_{x}$ 

where:

$$_{0}CV^{M} = A_{0} - PV (P^{A}_{t})_{0}$$

 $PV(P^A_t)_0$  is the present value of future net adjusted premiums which is also equal to  $A_0 + E^1$ . Using this value of  $PV(P^A_t)_0$ ,  $CV^M_0 = A_0 - (A_0 + E^1) = -E^1$ .

Substituting -  $E^1$  for  $CV_0$  in (6), we have:

(7) 
$${}_{1}CV^{M} = \underline{(P^{A}_{1} - E^{1})(1 + i) - q_{x} * F_{1}}$$
  
  $1 - q_{x}$ 

$$= \underbrace{(P^{A}_{1}) * (1+i) - q_{x} * F_{1}}_{1-q_{x}} - E^{1} * \underbrace{(1+i)}_{(1-q_{x})}$$

Formula (5) is shown for comparison of FPAL cash value to SNFL minimum:

(5) 
$${}_{1}CV = \underline{[P_{\underline{1}}] (1 + i') - {}_{\underline{1}}q_{\underline{x}} * F_{\underline{1}}} - (E + EC) * (1+i') - {}_{1}SC$$

These two formulas are identical with the following exceptions:

(a) Formula (5) develops policy values (and, therefore, cash surrender values) on a monthly basis while formula (7) is an annual calculation. The terms for interest and mortality in formula (5) are the monthly equivalents of the like terms in formula (7) based on the following assumptions:

$$(1 + i')^{12} = (1 + i)$$
 (compound interest)  
 $_1q_x = (1/12) * q_x$  (uniform distribution of deaths)

- (b) The monthly expense charge, E, in formula (5) does not appear in formula (7) because it is a level expense charge. Level expense charges are not subject to the first year expense allowance limit and do not appear in the formula for minimum cash values under SNFL.
- (c) The term EC in formula (5) is analogous to E<sup>1</sup> in formula (7). It will be demonstrated that the value of EC plus the surrender charge can never exceed the minimum expense allowance under SNFL. This is a necessary condition to substantiate that the FPAL policy value and corresponding cash value formulas satisfy minimum requirements.

For renewal periods after the first year, the same consistency as demonstrated above exists. Consider the t+1st month policy value where  $t \ge 12$ , just prior to the payment of the monthly premium  $P_{t+2}$ , which is due on the t+1st month anniversary day. The FPAL formula is:

(7) 
$$_{t+1}CV = (_{t}CV + P_{t+1}) (1 + i') - (1 + i') C_{t+1} - E (1 + i')$$

where:

(8) 
$$C_{t+1} = {}_{t+1}r_x \underbrace{[F_{t+1} - ({}_tCV + P_{t+1})]}_{1 + i'} = \underbrace{{}_{t+1}q_x - [F_{t+1} - ({}_tCV + P_{t+1})]}_{1 - {}_{t+1}q_x - 1 + i'}$$

Substituting (8) in (7), we have:

(9) 
$${}_{t+1}CV = ({}_{t}CV + P_{t+1} - E)(1 + i') - (1 + i') * \underbrace{{}_{t+1}q_x}_{t+1} \underbrace{[F_{t+1} - ({}_{t}CV + P_{t+1})]}_{(1 - {}_{t+1}q_x)1 + i'}$$

(10) 
$$t+1CV = \underbrace{(tCV + P_{t+1} - E)(1+i') - t+1}_{t+1}q_x * F_{t+1} + E * (1+i')*(t+1)q_x + 1 - t+1q_x$$

Using the retrospective method of calculating the SNFL minimum policy value for duration t+1, we have:

(11) 
$${}_{t+1}CV^{M} = \underline{({}_{t}CV^{M} + P^{A}_{t+1})(1+i) - q_{x+1} *}_{1 - q_{x+t}} F$$

The SNFL formula (11) is the same as the FPAL formula (10) except for the monthly versus annual time period, and except for the expense charge term, which is a level expense charge and does not appear in the formula for minimum cash values under SNFL.

Upon surrender of the Flexible Premium Adjustable Life Policy, a surrender charge is applied against the policy value. The surrender charge is determined by multiplying (d) times 90% of the lesser of (a), (b), and (c) where:

- (a) total premium paid in first 12 months after policy issue;
- (b) the Maximum Surrender Charge Premium;
- (c) \$25.00 per thousand of Specified Amount;
- (d) a factor based on policy year as follows:

Policy Year	Factor
1	1.00
2	.90
3	.83
4	.76
5	.69
6	.62
7	.55
8	.48
9	.41
10	.34
11	.27
12	.20
13	.13
14	.06
15+	0

Given we calculated the Flexible Premium Adjustable Life policy values using the minimum interest rate of 3% and the maximum monthly cost of insurance rates, the cash surrender values will be greater than the minimum policy values required by the SNFL, provided that the surrender charge can never be greater than the unamortized and unused portion of the maximum first year expense allowance under the SNFL.

The formula for the SNFL maximum allowance is:

$$E = (1.25 * H) + 10$$

where H is the minimum value of P or 40. [P is the Net Level Annual Premium].

Table 2 summarizes the maximum SNFL first year expense allowance age-by-age for comparison versus the maximum surrender charge. The nonforfeiture interest rate used is the maximum rate allowed by law (5%). Using a rate in excess of the policy's guarantee rate produces a smaller SNFL maximum first year expense allowance which is conservative when demonstrating compliance with SNFL.

As shown in Table 2, for each age, the maximum surrender charge plus the first year expense charge is less than the SNFL maximum first year expense allowance.

Table 3 shows, for various issue ages, the run off of the unamortized first year expense allowance versus the surrender charge. Note that in the ten years after issue and in the ten years following an increase, there is an annualized expense charge per \$1,000 of Specified Amount that varies by issue age or the age at the time of increase. The unamortized expense allowance reflects this charge. Table 4 contains the Maximum Surrender Charge Premiums and Table 5 contains the monthly expense charges per \$1,000 of Specified Amount.

A comment should be made about the consistency between the adjusted premiums (PA) in the SNFL formulas and the net premiums less level expense charge (P-E) in the FPAL policy value formulas. The present value of adjusted premiums is equal to the present value of future benefits plus the first year expense allowance (E¹) at time of issue in the SNFL formula. Likewise, the present value of net premiums less level expense charge (P-E) (where P equals 85% of gross premiums and E equals \$9.00) is equal to the present value of future benefits, using the minimum 3% interest rate and maximum cost of insurance rates, which are based on the appropriate 2001 CSO mortality table. Effectively, the SNFL formula and the FPAL cash policy value formula amortize the first year expense charges over the premium paying period of the policy, and the first year expense allowance in the SNFL formula is greater than the policy surrender charge in the FPAL policy value formula. Thus the FPAL cash surrender value must be greater than the minimum SNFL value by the unamortized portion of the excess first year expenses.

The method of calculating policy values is described in the policy form and annually the Company will furnish the insured a statement showing the current policy values.

#### IV. VALUATION BASIS

The Standard Valuation Law requires minimum reserves to be computed under the Commissioner's Reserve Valuation Method (CRVM). The statutory reserve of this policy will be calculated as the greater of the following: the CRVM method; the reserve for the no-lapse guarantee; or the cash surrender value (see attached Statutory Reserves memo).

Andrew W. Martin, F.S.A., M.A.A.A.

Associate Actuary

#### 2001 CSO Guaranteed COI Rates

Issue Age	Male PPNT	Male PNT	Male NT	Male PT	Male T	Female PPNT	Female PNT	Female NT	Female PT	Female T
0,	0.00097	0.00097	0.00097	0.00097	0.00097	0.00048	0.00048	0.00048	0.00048	0.0004
1	0.00056	0.00056	0.00056	0.00056	0.00056	0.00035	0.00035	0.00035	0.00035	0.0003
2	0.00039	0.00039	0.00039	0.00039	0.00039	0.00026	0.00026	0.00026	0.00026	0.0002
3	0.00027	0.00027	0.00027	0.00027	0.00027	0.00020	0.00020	0.00020	0.00020	0.0002
4	0.00021	0.00021	0.00021	0.00021	0.00021	0.00019	0.00019	0.00019	0.00019	0.0001
5	0.00021	0.00021	0.00021	0.00021	0.00021	0.00018	0.00018	0.00018	0.00018	0.0001
6	0.00022	0.00022	0.00022	0.00022	0.00022	0.00018	0.00018	0.00018	0.00018	0.0001
7	0.00022	0.00022	0.00022	0.00022	0.00022	0.00021	0.00021	0.00021	0.00021	0.0002
8	0.00022	0.00022	0.00022	0.00022	0.00022	0.00021	0.00021	0.00021	0.00021	0.0002
9	0.00023	0.00023	0.00023	0.00023	0.00023	0.00021	0.00021	0.00021	0.00021	0.0002
10	0.00023	0.00023	0.00023	0.00023	0.00023	0.00022	0.00022	0.00022	0.00021	0.0002
11	0.00027	0.00027	0.00027	0.00027	0.00027	0.00023	0.00023	0.00023	0.00023	0.0002
12	0.00033	0.90033	0.00033	0.00033	0.00033	0.00027	0.00027	0.00027	0.00027	0.0002
13.	0.00039	0.00039	0.00039	0.00039	0.00039	0.00030	0.00030	0.00027	0.00027	ł .
14	0.00047	0.00047	0.00047	0.00047	0.00047	0.00033	0.00033	0.00033	1 .	0.00030
15	0.00061	0.00061	0.00061	0.00061	0.00061	0.00035	0.00035		0.00033	0.00033
16	0.00074	0.00074	0.00074	0.00074	0.00074	0.00033		0.00035	0.00035	0.00035
17	0.00087	0.00087	0.00087	0.00074	0.00074	ł	0.00039	0.00039	0.00039	0.00039
18	0.00094	0.00094	0.00094		l I	0.00041	0.00041	0.00041	0.00041	0.00041
19	0.00094	0.00094	0.00094	0.00094 0.00098	0.00094	0.00043	0.00043	0.00043	0.00043	0.00043
20	0.00098	0.00098			0.00098	0.00046	0.00046	0.00046	0.00046	0.00046
21	0.00095	0.00095	0.00095	0.00127	0.00127	0.00045	0.00045	0.00045	0.00058	0.00058
22	0.00095	l i	0.00095	0.00133	0.00133	0.00046	0.00046	0.00046	0.00061	0.00061
	i i	0.00095	0.00095	0.00140	0.00140	0.00048	0.00048	0.00048	0.00065	0.00065
23	0.00096	0.00096	0.00096	0.00146	0.00146	0.00048	0.00048	0.00048	0.00067	0.00067
24	0.00097	0.00097	0.00097	0.00154	0.00154	0.00050	0.00050	0.00050	0.00072	0.00072
25	0.00098	0.00098	0.00098	0.00163	0.00163	0.00050	0.00050	0.00050	0.00077	0.00077
26	0.00102	0.00102	0.00102	0.00171	0.00171	0.00053	0.00053	0.00053	0.00081	0.00081
27	0.00107	0.00107	0.00107	0.00181	0.00181	0.00057	0.00057	0.00057	0.00087	0.00087
28	0.00105	0.00105	₹ 0.00105	0.00182	0.00182	0.00058	0.00058	0.00058	0.00092	0.00092
29	0.00103	0.00103	0.00103	0.00181	0.00181	0.00062	0.00062	0.00062	0.00099	0.00099
30	0.00102	0.00102	0.00102	0.00180	0.00180	0.00064	0.00064	0.00064	0.00103	0.00103
31	0.00101	0.00101	0.00101	0.00180	0.00180	0.00068	0.00068	0.00068	0.00112	0.00112
32	0.00101	0.00101	0.00101	0.00182	0.00182	0.00072	0.00072	0.00072	0.00119	0.00119
33	0.00104	0.00104	0.00104	0.00187	0.00187	0.00076	0.00076	0.00076	0.00128	0.00128
34	0.00106	0.00106	0.00106	0.00194	0.00194	0.00082	0.00082	0.00082	0.00139	0.00139
35	0.00109	0.00109	0.00109	0.00200	0.00200	0.00089	0.00089	0.00089	0.00153	0.00153
36	0.00115	0.00115	0.00115	0.00211	0.00211	0.00095	0.00095	0.00095	0.00165	0.00165
37	0.00120	0.00120	0.00120	0.00223	0.00223	0.00103	0.00103	0.00103	0.00179	0.00179
38	0.00129	0.00129	0.00129	0.00240	0.00240	0.00107	0.00107	0.00107	0.00188	0.00175
39	0.00137	0.00137	0.00137	0.00257	0.00257	0.00113	0.00113	0.00113	0.00200	0.00188
40	0.00146	0.00146	0.00146	0.00277	0.00277	0.00120	0.00120	0.00120	0.00212	0.00200
41	0.00158	0.00158	0.00158	0.00303	0.00303	0.00127	0.00127	0.00127	0.00212	
42	0.00173	0.00173	0.00173	0.00333	0.00333	0.00127	0.00127	0.00127	0.00226	0.00226
43	0.00190	0.00190	0.00190	0.00369	0.00369	0.00133	0.00133	0.00133	0.00243	0.00243
44	0.00210	0.00210	0.00210	0.00412	0.00309	0.00143	0.00143	1	1.	0.00263
45	0.00233	0.00233	0.00210	0.00412	0.00412	0.00137		0.00157	0.00286	0.00286
46	0.00255	0.00255	0.00255	0.00499	0.00437	0.00171	0.00171	0.00171	. 0.00313	0.00313
47	0.00279	0.00279	0.00279	0.00546	0.00546		0.00187	0.00187	0.00343	0.00343
48	0.00293	0.00273	0.00279	0.00572		0.00207	0.00207	0.00207	0.00381	0.00381
49	0.00293	0.00293		. 1	0.00572	0.00229	0.00229	0.00229	0.00428	0.00428
50	0.00333	0.00309	0.00309	0.00602	0.00602	0.00253	0.00253	0.00253	0.00481	0.00481
51	0.00332	i	0.00332	0.00645	0.00645	0.00281	0.00281	0.00281	0.00539	0.00539
		0.00359	0.00359	0.00696	0.00696	0.00312	0.00312	0.00312	0.00602	0.00602
52 53	0.00396	0.00396	0.00396	0.00766	0.00766	0.00347	0.00347	0.00347	0.00671	0.00671
53	0.00436	0.00436	0.00436	0.00846	0.00846	0.00385	0.00385	0.00385	0.00744	0.00744
54	0.00487	0.00487	0.00487	0.00945	0.00945	0.00425	0.00425	0.00425	0.00825	0.00825
55	0.00550	0.00550	0.00550	0.01057	0.01057	0.00468	0.00468	0.00468	0.00909	0.00909
56	0.00614	0.00614	0.00614	0.01171	0.01171	0.00518	0.00518	0.00518	0.00999	0.00999
57	0.00683	0.00683	0.00683	0.01292	0.01292	0.00570	0.00570	0.00570	0.01095	0.01095
58	0.00742	0.00742	0.00742	0.01388	0.01388	0.00626	0.00626	0.00626	0.01188	0.01188
59	0.00811	0.00811	0.00811	0.01498	0.01498	0.00682	0.00682	0.00682	0.01291	0.01291
60	0.00893	0.00893	0.00893	0.01631	0.01631	0.00740	0.00740	0.00740	0.01399	

#### 2001 CSO Guaranteed COI Rates

	Issue Age	Male PPNT	Male PNT	Male NT	Male PT	Male T	Female PPNT	Female PNT	Female NT	Female PT	Female T
	61	0.00993	0.00993	0.00993	0.01797	0.01797	0.00804	0.00804	0.00804	0.01510	0.01510
	62	0.01115			0.01996	0.01996	0.00873	0.00873	0.00873	0.01635	0.01635
	63	0.01252		1	0.02218	0.02218	0.00944	0.00944	0.00944	0.01761	0.01761
	64	0.01397	1	0.01397	0.02445	0.02445	0.01021	0.01021	0.01021	0.01893	0.01893
	65	0.01549		0.01549	0.02669	0.02669	0.01106	0.01106	0.01106	0.02037	0.02037
	66	0.01703	1	0.01703	0.02885	0.02885	0.01200	0.01200	0.01200	0.02191	0.02191
	67	0.01860 0.02028	ł.	0.01860	0.03095	0.03095	0.01303	0.01303	0.01303	0.02364	0.02364
	68 69	0.02028	1	0.02028	0.03316	0.03316	0.01419	0.01419	0.01419	0.02553	0.02553
	70	0.02203	1	0.02203	0.03535	0.03535	0.01545	0.01545	0.01545	0.02759	0.02759
	71	0.02652	0.02652	0.02415 0.02652	0.03801 0.04092	0.03801	0.01684	0.01684	0.01684	0.02989	0.02989
	72	0.02963	0.02963	0.02963	0.04092	0.04092	0.01845	0.01845	0.01845	0.03252	0.03252
	73	0.03292	0.03292	0.03292	0.04886	0.04488 0.04886	0.02024	0.02024	0.02024	0.03541	0.03541
	74	0.03638	0.03638	0.03638	0.05288	0.04888	0.02219 0.02433	0.02219	0.02219	0.03853	0.03853
-	75	0.04016	0.04016	0.04016	0.05757	0.05757	0.02433	0.02433	0.02433	0.04196	0.04196
- 1	76	0.04429	0.04429	0.04429	0.06255	0.06255	0.02070	0.02970	0.02670 0.02930	0.04540 0.04916	0.04540
١	<b>7</b> 7	0.04909	0.04909	0.04909	0.06833	0.06833	0.03217	0.03217	0.02330	0.05320	0.04916 0.05320
	78	0.05470	0.05470	0.05470	0.07501	0.07501	0.03533	0.03533	0.03533	0.05757	0.05757
	79	0.06118	0.06118	0.06118	0.08262	0.08262	0,03876	0.03876	0.03876	0.06228	0.06228
	80	0.06826	0.06826	0.06826	0.09075	0.09075	0.04258	0.04258	0.04258	0.06737	0.06737
	81	0.07632	0.07632	0.07632	0.09987	0.09987	0.04778	0.04778	0.04778	0.07453	0.07453
	82 83	0.08473	0.08473	0.08473	0.10909	0.10909	0.05365	0.05365	0.05365	0.08232	0.08232
-	84	0.09382 0.10389	0.09382	0.09382	0.11877	0.11877	0.05950	0.05950	0.05950	0.08992	0.08992
	85	0.11517	0.10389 0.11517	0.10389 0.11517	0.12932	0.12932	0.06598	0.06598	0.06598	0.09810	0.09810
	86	0.12768	0.12768	0.11317	0.14173	0.14175 0.15538	0.07329	0.07329	0.07329	0.10634	0.10634
1	87	0.14139	0.14139	0.14139	0.17007	0.17007	0.07992 0.08992	0.07992	0.07992	0.11323	0.11323
	88	0.15610	0.15610	0.15610	0.18555	0.18555	0.10038	0.08992	0.08992 0.10038	0.12416	0.12416
	89	0.17167	0.17167	0.17167	0.20160	0.20160	0.11156	0.11156	0.10038	0.13509 0.14611	0.13509 0.14611
1	90	0.18796	0.18796	0.18796	0.21802	0.21802	0.12188	0.12188	0.12188	0.15503	0.15503
	91	0.20332	0.20332	0.20332	0.23286	0.23286	0.12710	0.12710	0.12710	0.15697	0.15697
	92	0.21937	0.21937	0.21937	0.24804	0.24804	0.13740	0.13740	0.13740	0.16490	0.16490
1	93	0.23634	0.23634	0.23634	0.26377	0.26377	0.15270	0.15270	0.15270	0:17769	0.17769
1	94 95	0.25433	0.25433	0.25433	0.28013	0.28013	0.17207	0.17207	0.17207	0.19406	0.19406
1	96	0.27327 0.29066	0.27327 0.29066	0.27327	0.29829	0.29829	0.19607	0.19607	0.19607	0.21889	0.21889
	97	0.30926	0.30926	0.29066 0.30926	0.31435	0.31435	0.21895	0.21895	0.21895	0.24168	0.24168
	98	0.32917	0.32917	0.32917	0.33134	0.33134	0.24260	0.24260	0.24260	0.26466	0.26466
	99	0.35049	0.35049	0.35049	0.36839	0.36839	0.26026	0.24666 0.26026	0.24666	0.26577	0.26577
	100	0.37337	0.37337	0.37337	0.38859	0.38859	0.28193	0.28193	0.28193	0.27702 0.29642	0.27702 0.29642
	101	0.39158	0.39158	0.39158	0.40392	0.40392	0.30512	0.30512	0.30512	0.31720	0.31720
1	102	0.41105	0.41105	0.41105	0.42013	0.42013	0.33108	0.33108	0.33108	0.34016	0.34016
	103	0.43184	0.43184	0.43184	0.43720	0.43720	0.35950	0.35950	0.35950	0.36488	0.36488
	104	0.45403	0.45403	0.45403	0.45521	0.45521	0.39093	0.39093	0.39093	0.39180	0.39180
	105 106	0.47740 0.50233	0.47740	0.47740	0.47850	0.47850	0.42510	0.42510	0.42510	0.42592	0.42592
	107	0.50233	0.50233	0.50233	0.50337	0.50337	0.46033	0.46033	0.46033	0.46108	0.46108
	108	0.55737	0.55737	0.52895 0.55737	0.52992	0.52992	0.49662	0.49662	0.49662	0.49732	0.49732
	109	0.58770	0.58770	0.58770	0.53828	0.55826 0.58852	0.53334	0.53334	0.53334	0.53399	0.53399
	110	0.62005	0.62005	0.62005	0.62081	0.62081	0.57181	0.57181	0.57181	0.57241	0.57241
	111	0.65460	0.65460	0.65460	0.65528	0.65528	0.64969	0.64969	0.64969	0.61195	0.61195 0.65020
	112	0.69147	0.69147	0.69147	0.69209	0.69209	0.68705	0.68705	0.68705	0.68750	0.68750
	113	0.73087	0.73087	0.73087	0.73140	0.73140	0.72125	0.72125	0.72125	0.72166	0.72166
	114	0.77292	0.77292	0.77292	0.77339	0.77339	0.76978	0.76978	0.76978	0.77013	0.77013
	115	0.81785	0.81785	0.81785	0.81824	0.81824	0.81526	0.81526	0.81526	0.81556	0.81556
-	116	0.86586	0.86586	0.86586	0.86617	0.86617	0.86279	0.86279	0.86279	0.86302	0.86302
	117 118	0.91717	0.91717	0.91717	0.91742	0.91742	0.91531	0.91531	0.91531	0.91548	0.91548
	119	0.97206 1.00000	0.97206 1.00000	0.97206	0.97221	0.97221	0.96414	0.96414	0.96414	0.96426	0.96426
	120	1.00000	1.00000	1.00000	1.00000	1.00000	00000.1	1.00000	1.00000	1.00000	1.00000
					1.00000 1	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

Table 2

MALE	PREFERRED	PLUS	NONTOR	ACCO

\*\* - 1 }

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
		MAXIMUM	FIRST	AVERAGE	(2) - (3) INITIAL		(4) + (5)	(1) - (6)
	NET LEVEL	FIRST YEAR	YEAR	RENEWAL	ACQUIS	MAXIMUM		Linuore
ISSUE	ANNUAL	EXPENSE	EXPENSE	EXPENSE	EXPENSE	SURRENDER	TOTAL	UNUSED
AGE	PREMIUM	ALLOWANCE	CHARGE	CHARGE	CHARGE	CHARGE	CHARGES	EXPENSE ALLOWANCE
0	1.70	12.12	3.90	1.85	2.05	2.25	400	
1	1.74	12.17	3.90	1.85	2,05	2.39	4.30 4.44	7.82
2	1.80	12.25	3,90	1.85	2.05	2.52	4.44	7.73
- 3	1.87	12.34	3.90	1.85	2.05	2.65	4.70	7.68
4	1.96	12.45	3.90	1.85	2.05	2.78	4.83	7.64
5	2.05	12.56	3.90	1.85	2.05	2.92	4.97	7.61
6	2.15	12.68	3.90	1.85	2.05	3.05	5,10	7.59
7	2.25	12.81	3.90	1.85	2.05	3.18	5.23	7.58
8	2.35	12.94	3.90	1.85	2.05	3.31	5.36	7.58
'9	2.47	13.08	3,90	1.85	2.05	3.45	5.50	7.58
10	2.59	13.23	3.90	1.85	2.05	3.58	5.63	7.58 7.60
11	2.71	13.39	3,90	1.85	2.05	3.71	5.76	7.63
12	2.84	13.55	3.90	1.85	2.05	3.84	5.90	7.65
13	2.97	13.72	3.90	1.85	2.05	3.98	6.03	7.69
14	3.11	13.89	3.90	1.85	2.05	4.11	6.17	7.73
15	3.26	14.07	3.90	1.85	2.05	4.24	6.29	7.78
16	3.40	14.25	3.90	1.85	2.05	4.37	6.43	7.82
17	3.54	14.43	3.90	1.85	2.05	4.51	6.56	7.87
18	3.69	14.61	3.90	1.85	2.05	4.64	6.70	7.92
19	3.84	14.80	3.90	1.85	2.05	4.77	6.82	7.98
20	4.00	15.00	3.62	1.72	1.91	3.02	4.92	10.08
21	4.17	15.21	3.64	1.72	1.91	3.13	5.05	10.16
22	4.35	15.43	3.64	1.72	1.91	3.25	5.16	10.27
23	4.53	15.67	3.64	1.72	1.91	3.37	5.28	10.39
24	4.73	15.92	3.64	1.72	1.91	3.48	5.40	10.52
25	4.94	16.18	3.64	1.72	1.91	3.60	5.51	10.67
26	5.17	16.4 <del>6</del>	3.65	1.73	1.92	3.79	5.71	10.75
27	5.40	16.75	3.65	1.73	1,92	3.98	5.90	10.85
28	5.65	17.06	3:65	1.73	1.92	4.17	6.09	10.97
29	5.91	17.38	3.65	1.73	1,92	4.36	6.28	11.11
30	6.19	17.73	3.66	1.73	1.93	4.55	6.47	11.26
31 32	6.48	18.10	3.66	1.73	1.93	4.73	6.66	11,44
32	6.80	18.50	3.66	1.73	1.93	4.92	6.85	11.65
34	7.13	18.92	3.67	1.74	1.93	5.11	7.04	11.87
35	7.49	19.36	3.67	1.74	1.93	5.30	7.23	12.13
36	7.87	19.84	3.67	1.74	1.93	5.49	7.42	12.41
37	8.27 8.69	20.34	3.67	1.74	1.93	5.75	7.68	12.65
38	9.14	20.87	3.68	1.75	1.94	6.01	7.95	12.92
39	9.62	21.43	3.68	1.75	1,94	6.27	8.21	13.22
40	10.13	22.03	3.70	1.75	1.95	6.53	8.48	13.55
41	10.13	22.66	3.70	1.75	1.95	6.80	8.74	13.92
42	11.23	23.33	3.70	1.75	1.95	7.06	9.00	14.33
43	11.83	24.04 24.78	3.71	1.76	1.95	7.32	9.27	14.77
44	12.46	24.78 25.58	3.71	1.76	1.95	7.58	9.53	15.25
45	13.13	25.58 26.41	3.72	1.76	1.96	7.84	9.80	15.78
•••	10.10	20.41	3.72	1.76	1.96	8.10	10.06	16.35

Table 2

MAIF	PREFERRED	DI HO MA	NTODACCO
	I IVEL LIVICED	PLUS NO	JIV I UBALLU

		(1)	(2)	(3)	(4) (2) - (3)	(5)	(6)	(7)
		MAXIMUM	FIRST	AVERAGE	INITIAL		(4) + (5)	(1) - (6)
	NET LEVEL	FIRST YEAR	YEAR	RENEWAL	ACQUIS	MAXIMUM		UNUSED
ISSUE	ANNUAL	EXPENSE	EXPENSE	EXPENSE	EXPENSE	SURRENDER	TOTAL	EXPENSE
AGE	PREMIUM	ALLOWANCE	CHARGE	CHARGE	CHARGE	CHARGE	CHARGES	ALLOWANCE
			•				01041020	ALLOWANCE
46	13.83	27.29	3.72	1.76	1.96	8.60	10.55	16.74
47	14.58	28.23	3.73	1.77	1.96	9,09	11.05	17.17
48	15.37	29.21	3.73	1.77	1.96	9.59	11.55	17.67
49	16.22	30.27	3.74	1.77	1.97	10.08	12.05	18.22
50	17.12	31,40	3.76	1.78	1.98	10.58	12.55	18.85
51	18.09	32.61	3.76	1.78	1.98	11.07	13.05	19.56
52	19.12	33.90	3.77	1.78	1.98	11.57	13.55	20.35
53 54	20.22	35.27	3.78	1.79	1.99	12.06	14.05	21.22
54 55	21.39	36.73	3.78	1.79	1.99	12.56	14.54	22.19
56	22.63	38.29	3.79	1.80	2.00	13.05	15.05	23.24
57	23.94	39,93	4.04	1.92	2.13	13.77	15.90	24.03
57 58	25.34	41.67	4.06	1.92	2.13	14.49	16.62	25.05
59	25.82 28.41	43.52	4.07	1.93	2.14	15.21	17.35	26.17
60		45.51	4.08	1.93	2.15	15.93	18.08	27.43
61	30.11 31.93	47.64	4.09	1.94	2.15	16.65	18.80	28.83
62	.33.87	49.91	4.10	1.94	2.16	17.42	19.58	30.33
63	35.94	52.34 54.92	4.12	1.95	2.17	18,20	20.36	31.98
64	38.12		4.13	1.96	2.17	18,97	21.14	33.78
65	40.45	57.66 60.00	4.15	1.97	2.19	19.75	21.93	35.72
66	42.94	60.00	4.18	1.98	2.20	20.52	22.72	37.28
67	45.59	60.00	4.19	1.98	2.20	21.58	23.79	36.21
68	48,46	60.00	4.21	2.00	2.22	22.50	24.72	35.28
69	51.56	60,00	4.25 4.28	2.01	2.24	22.50	24.74	35.26
70	54.93	60.00	4.32	2.03	2.25	22,50	24.75	35.25
71	58.57		4.36	2.05	2.27	22.50	24.77	35,23
72	62.53	₹ 60.00 60.00	4.42	2.06	2.29	22.50	24.79	35,21
73	66.78	60.00	4.48	2.09 2.12	2.32	22.50	24.82	35.18
74	71.35	60.00	4.57	2.12	2.36	22.50	24.86	35.14
75	76.31	60.00	4.68	2.17	2.41	22.50	24.91	35.09
76	81.70	60.00	4.85	2.30	2.46 2.55	22.50	24.96	35.04
77	87,56	60.00	5.10	2.42	2.68	22.50	25.05	34.95
78	93,94	60.00	5.59	2.65	2.94	22.50	25.18	34.82
79	100.84	60.00	6.96	3.30	3.66	22.50	25.44	34.56
80	108.27	60.00	8.34	3.95	4.39	22.50	26.16	33.84
81	116.26	60,00	9.71	4.60	5.11	22.50	26.89	33.11
82	124.80	60.00	11.09	5.25	5.84	22.50	27.61	32.39
83	133.98	60.00	12.46	5.90	6.56	22.50 22.50	28.34	31.66
84	143.89	60.00	13.84	6.55	7.28	22.50	29.06	30.94
85	154.53	60.00	15.20	7.20	8.00	22.50	29.78	30.22
					0.00	4 AC.30	30.50	29.50

Table 2

MALE PREFERRED	NONTOBACCO
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		(1)	/2)	(2)				
		(1)	(2)	(3)	(4)	. (5)	(6)	(7)
		MAXIMUM	FIRST	AVEDACE	(2) - (3)		(4) + (5)	(1) - (6)
	NET LEVEL	FIRST YEAR		AVERAGE	INITIAL			
ISSUE	ANNUAL		YEAR	RENEWAL	ACQUIS	MUMIXAM		UNUSED
AGE	PREMIUM	EXPENSE	EXPENSE	EXPENSE	EXPENSE	SURRENDER	TOTAL	EXPENSE
AGE	PREMIUM	ALLOWANCE	CHARGE	CHARGE	CHARGE	CHARGE	CHARGES	ALLOWANCE
. 0	4 70							
1	1.70	12.12	3.90	1.85	2.05	2.25	4.30	7.82
	1.74	12.17	3.90	1.85	2.05	2.39	4 44	7.73
2 3	1.80	12.25	3.90	1.85	2.05	2.52	4.57	7.68
4	1.87	12.34	3.90	1.85	2.05	2.65	4.70	7.64
5	1,96	12.45	3.90	1.85	2.05	2.78	4.83	7.61
	2.05	12.56	3.90	1.85	2,05	2.92	4,97	7.59
6 7	2.15	12.68	3.90	1.85	2.05	3.05	5.10	7.58
	2.25	12.81	3.90	1.85	2.05	3.18	5,23	7.58
8	2.35	12.94	3.90	1.85	2.05	3.31	5.36	7.58
9	2.47	13.08	3.90	1.85	2.05	3.45	5.50	7.58
10	2.59	13.23	3.90	1.85	2.05	3.58	5.63	7.60
11	2.71	13.39	3.90	1.85	2.05	3.71	5.76	7.63
12	2.84	13.55	3.90	1.85	2.05	3.84	5.90	7.65
13	2.97	13.72	3.90	1.85	2.05	3.98	6.03	7.69
14	3.11	13.89	3.90	1.85	2.05	4.11	6.17	7.73
15	3.26	14.07	3.90	1.85	2.05	4.24	6.29	7.78
16	3.40	14.25	3.90	1.85	2.05	4.37	6.43	7.82
17	3.54	14.43	3.90	1.85	2.05	4.51	6.56	7.87
18	3.69	14.61	3.90	1.85	2.05	4.64	6.70	7.92
19	3.84	14.80	3.90	1.85	2.05	4.77	6.82	7.98
20	4.00	15.00	3.66	1.73	1.93	3.20	5.12	9.88
21	4.17	15.21	3.66	1.73	1.93	3.32	5.25	9.96
22	4.35	15.43	3.67	1.74	1.93	3.45	5.38	10.05
. 23	4.53	15.67	3,67	1.74	1.93	3.57	5.51	10.16
24	4.73	15.92	3.67	1.74	1.93	3.70	5.63	10.29
25	4.94	16,18	3.68	1.75	1.94	3.83	5.76	10.42
26	5.17	16.46	3.68	1.75	1.94	4.01	5,95	10.51
27	5.40	16.75	3.68	1.75	1.94	4.20	6.14	10.61
28	5.65	17.06	3.68	1.75	1.94	4.40	6.34	10.72
29	5.91	17.38	3.70	1.75	1.95	4.59	6.54	10.85
30	6.19	17.73	3,70	1.75	1.95	4.78	6.72	11.01
31	6.48	18.10	3.70	1.75	1.95	4.97	6.91	11.19
32 33	6.80	18,50	3.71	1.76	1.95	5.16	7.11	11.39
33 34	7.13	18.92	3.71	1.76	1.95	5.36	7.31	11.61
	7.49	19.36	3.72	1.76	1.96	5.54	7.50	11.86
35 36	7.87	19.84	3.72	1.76	1.96	5.73	7.69	12.14
37	8.27	20.34	3.72	1.76	1.96	6.01	7.97	12.37
38	8.69	20.87	3.73	1.77	1.96	6.29	8.26	12.61
39	9.14	21.43	3.73	1.77	1.96	6.56	8.53	12.91
	9.62	22.03	3.74	1.77	1.97	6.84	8.81	13.22
40	10.13	22.66	3.74	1.77	1.97	7.12	9.09	13.57
41	10.66	23,33	3.76	1.78	1.98	7.40	9.37	13.95
42 43	11,23	24.04	3.76	1.78	1.98	7.68	9.65	14.38
43 44	11.83	24.78	3.77	1.78	1.98	7.95	9.93	14.85
44 45	12.46	25.58	3.77	1.78	1.98	8.23	10.21	15.37
40	13.13	26.41	3.78	1.79	1.99	8.51	10.49	15.92

Table 2

MALE	PREFERRED	NONTOBACCO

	•	(1)	(2)	(3)	(4) (2) - (3)	(5)	(6) (4) + (5)	(7) (1) - (6)
ISSUE AGE	NET LEVEL ANNUAL PREMIUM	MAXIMUM FIRST YEAR EXPENSE ALLOWANCE	FIRST YEAR EXPENSE CHARGE	AVERAGE RENEWAL EXPENSÉ CHARGE	INITIAL ACQUIS EXPENSE CHARGE	MAXIMUM SURRENDER CHARGE	TOTAL CHARGES	UNUSED EXPENSE ALLOWANCE
46	13.83	27.29	3.78	1.79	1.99	9.01	11.00	16.29
47	14.58	28.23	3.79	1.80	2.00	9.50	11.50	16.73
48	15.37	29.21	3.79	1.80	2.00	10.01	12.00	17.21
49	16.22	30.27	3.80	1.80	2.00	10.50	12.51	17.77
50	17.12	31.40	3,82	1.81	2,01	11.01	13.02	18.39
51 52	18.09	32.61	3.83	1.81	2.01	11.50	13.52	19.09
52 53	19.12 20.22	33.90	3.83	1.81	2.01	12.01	14.02	19.88
54	21.39	35.27 36.73	3.84	1.82	2.02	12.50	14.52	20.75
55	22.63	38.29	3.85 3.86	1.82	2.03	13.01	15.03	21.70
56	23.94	39.93	4.10	1.83	2.03	13.50	15.53	22.75
57	25.34	41.67	4.12	1.94 1.95	2.16	14.36	16.52	23.40
58	26.82	43.52	4.13	1.96	2.17 2.17	15.23 16.09	17.39	24.28
59	28,41	45.51	4.14	1.96	2.18	16.96	18.26	25.26
60	30.11	47.64	4.16	1.97	2.19	17.82	19.13 20.01	26.37
61	31.93	49.91	4.18	1,98	2.20	18.73	20.93	27.63 28.99
62	33,87	52.34	4.19	1.98	2.20	19.64	21.84	30.50
63	35.94	54.92	4.21	2.00	2.22	20,55	22.76	32.16
64	38.12	57.66	4.22	2,00	2.22	21.46	23.68	33.98
65	40.45	60.00	4.25	2.01	2,24	22.37	24.60	35.40
66	42.94	60.00	4.27	2.02	2,25	22,50	24.75	35.25
67	45.59	60.00	4.30	2.03	2.26	22.50	24.76	35.24
68	48.46	60.00	4.33	2.05	2.28	22,50	24.78	35,22
69 70	51.56	60.00	4.37	2.07	2.30	22.50	24.80	35.20
70	54.93	60.00	4.40	2.09	2.32	22.50	24.82	35.18
72	58.57 62.53	60.00	4.45	2.11	2.34	22.50	24.84	35.16
73	66.78	60.00 60.00	4.51	2.14	2.37	22.50	24.87	35.13
74	71.35	60,00	4.58 4.68	2.17	2.41	22.50	24.91	35.09
75	76.31	60.00	4.80	2.22 2.27	2.46	22,50	24.96	35.04
76	81.70	60.00	4.98	2.36	2.53 2.62	22.50	25,03	34.97
77	87.56	60.00	5.26	2,49	2.77	22.50 22.50	25.12	34.88
78	93.94	60.00	5.80	2.75	3.05	22.50	25.27	34.73
79	100.84	60.00	7.28	3.45	3.83	22.50	25.55	34.45
80	108.27	60.00	8.77	4.16	4.62	22.50	26,33 27.12	33.67 32.88
81	116.26	60.00	10.26	4.86	5.40	22.50	27.12	32.88 32.10
82	124.80	60.00	11.76	5.57	6,19	22.50	28.69	31.31
83	133.98	60.00	13.25	6.28	6.97	22.50	29.47	30.53
84	143.89	60.00	14.74	6.98	7.76	22.50	30.26	29.74
85	154.53	60.00	16,24	7.69	8.55	22.50	31.05	28.95

Table 2

LABA	E:	NACIA	TOD	A000
MAL	-	NON	IIOR	ACCO

NETLEVEL   NATILEVEL   NATIL		WALL HONTO	SACCO						
Net			(1)	(2)	(3)		(5)		
NET LEVEL   FIRST YEAR   YEAR   EXPENSE   EXPENSE   EXPENSE   EXPENSE   EXPENSE   EXPENSE   CHARGE			BA A VIDALIBA	FIDOT	41/2040			(4) + (5)	(1) - (6)
SAGE   PREMIUM   ALLOWANCE   EXPENSE   EXPENSE   CHARGE		METICAL							
AGE PREMIUM ALLOWANCE CHARGE CHARGE CHARGE CHARGES ALLOWANCE  1 1.70 12.12 3.90 1.85 2.05 2.25 4.30 7.82 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.1					RENEWAL	ACQUIS	MAXIMUM		UNUSED
AGE	ISSUE	ANNUAL	EXPENSE	EXPENSE	EXPENSE	EXPENSE	SURRENDER	TOTAL	EXPENSE
0 1.70 12.12 3.90 1.85 2.05 2.26 4.30 7.22 1 1.174 12.17 3.90 1.85 2.05 2.29 4.44 7.73 3.91 1.85 2.05 2.29 4.44 7.73 3.91 1.85 2.05 2.29 4.44 7.73 3.91 1.85 2.05 2.25 4.57 7.88 3 1.87 12.24 3.30 1.85 2.05 2.25 2.55 4.70 7.64 4.83 7.81 4.83 2.05 2.05 2.25 4.57 7.64 4.83 7.81 4.83 2.05 2.05 2.05 12.05 12.05 3.90 1.85 2.05 2.05 2.05 2.05 12.05 12.05 3.90 1.85 2.05 2.05 2.05 2.09 4.97 7.59 7.226 12.24 3.30 1.85 2.05 2.05 3.05 5.10 7.58 7.226 12.24 3.30 1.85 2.05 3.05 5.10 7.58 8 2.05 12.24 3.30 1.85 2.05 3.05 5.10 7.58 8 2.05 3.05 5.10 7.58 9 2.27 7.39 1.85 2.05 3.05 5.10 7.58 9 2.27 7.39 1.85 2.05 3.05 5.10 7.58 9 2.27 7.39 1.85 2.05 3.05 5.10 7.58 9 2.27 7.39 1.85 2.05 3.05 5.10 7.58 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	AGE	PREMIUM	ALLOWANCE	CHARGE	CHARGE	CHARGE			
1.74								0.0.0.020	/ LECTI/HOL
1, 174	. 0	1.70	12.12	3.90	1.85	2.05	2.25	4.30	7.82
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3         1.47         12.34         3.90         1.85         2.06         2.55         4.70         7.54           4         1.86         12.45         3.90         1.85         2.05         2.78         4.83         7.81           5         2.05         12.66         3.90         1.85         2.06         2.32         4.97         7.59           6         2.15         12.81         3.90         1.85         2.05         3.18         5.23         7.58           7         2.25         12.81         3.90         1.85         2.06         3.31         5.36         7.58           8         2.28         1.284         3.90         1.86         2.06         3.45         5.50         7.58           10         2.29         13.23         3.90         1.85         2.06         3.46         5.50         7.58           11         2.27         13.72         3.90         1.85         2.05         3.84         5.50         7.63           12         2.24         13.56         3.90         1.85         2.05         3.94         5.00         7.82           13         2.27         13.72         3.90 <t< td=""><td>2</td><td>1.80</td><td>12.25</td><td>3.90</td><td>1,85</td><td>2.05</td><td></td><td></td><td></td></t<>	2	1.80	12.25	3.90	1,85	2.05			
4 1.86 12.46 3.90 1.85 2.05 2.78 4.83 7.81 5.6 2.05 12.66 3.90 1.85 2.05 2.92 4.37 7.59 5.6 2.15 12.68 3.90 1.85 2.05 2.05 3.05 5.10 7.58 7 2.25 12.81 3.90 1.85 2.05 3.18 5.23 7.58 8 2.25 12.81 3.90 1.85 2.05 3.18 5.23 7.58 9 2.47 13.08 3.90 1.85 2.05 3.18 5.23 7.58 10 2.99 13.23 3.90 1.86 2.05 3.46 5.50 7.58 11 2.71 13.08 3.90 1.86 2.05 3.46 5.50 7.58 11 2.71 13.08 3.90 1.86 2.05 3.46 5.50 7.58 11 2.71 13.08 3.90 1.85 2.05 3.45 5.50 7.58 11 2.71 13.39 3.90 1.85 2.05 3.45 5.50 7.58 12 2.24 13.55 3.90 1.85 2.05 3.71 5.76 7.83 11 2.27 13.39 3.90 1.85 2.05 3.71 5.76 7.83 11 2.27 13.72 3.90 1.85 2.05 3.94 5.90 7.85 11 3.25 11 13.29 3.90 1.85 2.05 3.94 5.90 7.85 11 3.25 14.07 3.90 1.85 2.05 3.94 5.90 7.85 11 3.25 14.07 3.90 1.85 2.05 3.94 5.90 7.85 11 3.25 14.07 3.90 1.85 2.05 3.94 5.90 7.85 11 3.25 14.07 3.90 1.85 2.05 3.94 5.90 7.85 11 3.25 14.07 3.90 1.85 2.05 3.94 5.90 7.85 11 3.25 14.07 3.90 1.85 2.05 4.11 6.17 7.73 11 5.76 6.33 7.82 11 3.25 14.07 3.90 1.85 2.05 4.11 6.17 7.73 11 5.76 6.33 7.82 11 3.25 14.07 3.90 1.85 2.05 4.11 6.17 7.73 11 5.56 7.75 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 1.74 1.83 4.14 6.07 9.80 11 5.56 7.87 11 5.56 7.87 11 5.56 7.87 1.74 1.83 4.14 6.07 9.80 11 5.56 7.87 1.75 1.75 1.75 1.75 1.75 1.75 1.75 1.7	3	1.87	12.34	3.90	1.85				
5         2,05         12,56         3,90         1,86         2,06         2,92         4,97         7,759           6         2,15         12,26         3,90         1,85         2,06         3,18         5,23         7,58           7         2,25         12,81         3,90         1,85         2,06         3,31         5,36         7,58           8         2,35         1,294         3,90         1,85         2,06         3,45         5,50         7,58           10         2,59         13,23         3,90         1,85         2,05         3,58         5,53         7,60           11         2,271         13,39         3,90         1,85         2,05         3,58         5,53         7,60           12         2,84         13,55         3,90         1,85         2,05         3,24         5,90         7,65         7,83           13         2,97         13,72         3,90         1,85         2,05         3,41         5,90         7,65         7,83           14         3,11         13,89         3,90         1,85         2,05         3,41         6,17         7,73         1,65         3,06         3,37	4	1.96	12.45	3.90					
6 2.15 12.88 3.90 1.55 2.05 3.16 6.23 7.58 7 2.25 12.81 3.90 1.85 2.05 3.18 6.23 7.58 8 2.35 12.94 3.90 1.85 2.05 3.18 6.23 7.58 9 2.47 13.08 3.90 1.86 2.05 3.45 6.50 7.58 10 2.59 13.23 3.90 1.86 2.05 3.45 6.50 7.58 11 2.71 13.39 3.90 1.86 2.05 3.45 6.50 7.58 11 2.71 13.39 3.90 1.86 2.05 3.45 6.50 7.58 12 2.44 13.55 3.90 1.86 2.05 3.41 5.76 7.83 12 2.44 13.55 3.90 1.86 2.05 3.44 5.50 7.65 13 2.97 13.72 3.90 1.86 2.05 3.44 5.50 7.65 13 2.97 13.72 3.90 1.86 2.05 3.34 5.90 7.65 13 2.97 13.72 3.90 1.85 2.05 3.34 5.90 7.65 13 2.97 13.72 3.90 1.85 2.05 4.11 6.17 7.73 15 3.26 1407 3.90 1.85 2.06 4.11 6.17 7.73 16 3.46 14.47 3.90 1.85 2.06 4.11 6.17 7.73 15 3.26 14.07 3.90 1.85 2.06 4.11 6.17 7.73 15 3.26 14.07 3.90 1.85 2.05 4.77 6.43 7.82 17 3.54 14.43 3.90 1.55 2.05 4.77 6.43 7.82 17 3.54 14.43 3.90 1.55 2.05 4.77 6.82 7.78 19 3.84 14.80 3.90 1.85 2.05 4.77 6.82 7.78 19 3.84 14.80 3.90 1.85 2.05 4.77 6.82 7.78 19 3.84 14.80 3.90 1.85 2.05 4.77 6.82 7.78 19 3.84 14.80 3.90 1.85 2.05 4.77 6.82 7.98 2.0 4.00 15.00 3.65 1.73 1.93 3.74 6.60 9.34 21 4.17 15.21 3.86 1.73 1.93 3.74 6.86 9.34 21 4.17 15.21 3.86 1.73 1.93 3.74 6.86 9.34 21 4.17 15.21 3.86 1.73 1.93 3.74 6.86 9.34 21 4.77 15.21 3.86 1.73 1.93 3.74 6.86 9.34 21 4.77 15.21 3.86 1.73 1.93 3.74 6.86 9.38 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77 8.80 2.77	5								
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16         3.40         14.25         3.90         1.85         2.06         4.37         6.43         7.782           17         3.54         14.43         3.90         1.85         2.05         4.51         6.56         7.87           18         3.69         14.61         3.90         1.85         2.05         4.51         6.56         7.87           19         3.84         14.80         3.90         1.85         2.05         4.77         6.82         7.98           20         4.00         15.00         3.66         1.73         1.93         3.74         5.66         9.34           21         4.17         15.21         3.66         1.73         1.93         3.77         5.80         9.41           22         4.35         15.43         3.67         1.74         1.93         4.01         5.94         9.50           23         4.53         15.67         3.67         1.74         1.93         4.14         6.07         9.60           24         4.73         15.92         3.67         1.74         1.93         4.28         6.21         9.71           25         4.94         16.18         3.68									
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19 3.84 14.80 3.90 1.85 2.05 4.77 6.82 7.985 20 4.00 15.00 3.66 1.73 1.93 3.74 5.66 9.34 21 4.17 15.21 3.66 1.73 1.93 3.87 5.80 9.41 22 4.35 15.43 3.67 1.74 1.93 4.01 5.94 9.50 23 4.53 15.67 3.57 1.74 1.93 4.14 6.07 9.60 24 4.73 15.92 3.67 1.74 1.93 4.28 6.21 9.71 25 4.94 16.18 3.68 1.75 1.94 4.41 6.35 9.83 26 5.17 16.46 3.68 1.75 1.94 4.63 6.56 9.88 27 5.40 16.75 3.68 1.75 1.94 4.84 6.78 9.97 28 5.55 17.06 3.68 1.75 1.94 4.84 6.78 9.97 28 5.55 17.06 3.68 1.75 1.94 5.06 7.00 10.06 29 5.91 17.33 3.70 1.75 1.94 5.06 7.00 10.06 29 5.91 17.33 3.70 1.75 1.95 5.27 7.22 10.17 30 6.19 17.73 3.70 1.75 1.95 5.49 7.44 10.30 31 6.48 18.10 3.70 1.75 1.95 5.49 7.44 10.30 31 6.48 18.10 3.70 1.75 1.95 5.49 7.44 10.30 31 6.48 18.10 3.70 1.75 1.95 5.49 7.44 10.30 31 6.48 18.10 3.70 1.75 1.95 5.92 7.87 10.62 33 7.13 18.92 3.71 1.76 1.95 5.92 7.87 10.62 33 7.13 18.92 3.71 1.76 1.95 5.92 7.87 10.62 33 7.13 18.92 3.71 1.76 1.95 5.92 7.87 10.62 33 7.13 18.92 3.71 1.76 1.95 5.92 7.87 10.62 33 7.13 18.92 3.71 1.76 1.96 6.35 8.31 11.05 35 7.87 19.84 3.72 1.76 1.96 6.35 8.31 11.05 35 7.87 19.84 3.72 1.76 1.96 6.35 8.31 11.05 35 7.87 19.84 3.72 1.76 1.96 6.35 8.31 11.05 35 7.87 19.84 3.72 1.76 1.96 6.35 8.31 11.05 36 8.27 2.034 3.72 1.76 1.96 7.25 9.22 11.65 38 9.14 2.143 3.73 1.77 1.96 7.25 9.22 11.65 38 9.14 2.143 3.73 1.77 1.96 7.25 9.22 11.65 38 9.14 2.143 3.73 1.77 1.96 7.25 9.92 11.65 38 9.14 2.143 3.73 1.77 1.96 7.60 9.56 11.87 39 9.52 2.20 3.74 1.77 1.97 7.94 9.91 12.12 40 10.13 2.266 3.74 1.77 1.97 7.94 9.91 12.12 40 10.13 2.266 3.74 1.77 1.97 7.94 9.91 12.12 40 10.13 2.266 3.74 1.77 1.78 1.98 8.96 10.94 13.94 44 12.46 2.558 3.77 1.78 1.98 9.96 10.83 13.94 44 12.46 2.558 3.77 1.78 1.98 9.96 10.83 13.94 44 12.46 2.558 3.77 1.78 1.98 9.96 10.45 13.94 44 12.46 2.558 3.77 1.78 1.98 9.96 10.83 13.94 44 12.46 2.558 3.77 1.78 1.98 9.95 11.63 13.94 44 12.46 2.558 3.77 1.78 1.98 9.95 11.63 13.94 44 12.46 2.558 3.77 1.78 1.98 9.95 11.63 13.94 44 12.46 2.558 3.77 1.78 1.98 9.95 11.63 13.94 44 12.46 2.558 3.77 1.78 1.98 9.95 11.129 13.49 44									
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21         4.17         15.21         3.66         1.73         1.93         3.87         5.80         9.41           22         4.35         15.43         3.67         1.74         1.93         4.01         5.94         9.50           23         4.53         15.67         3.67         1.74         1.93         4.14         6.07         9.60           24         4.73         15.92         3.67         1.74         1.93         4.28         6.21         9.71           25         4.94         16.18         3.68         1.75         1.94         4.41         6.35         9.83           26         5.17         16.46         3.68         1.75         1.94         4.63         6.56         9.89           27         5.40         15.75         3.68         1.75         1.94         4.84         6.78         9.97           28         5.65         17.06         3.68         1.75         1.94         4.84         6.78         9.97           28         5.65         17.06         3.68         1.75         1.94         5.06         7.00         10.06           29         5.91         17.38         3.70									7.98
22         4.35         15.43         3.67         1.74         1.93         4.01         5.94         9.59           23         4.53         15.67         3.67         1.74         1.93         4.14         6.07         9.60           24         4.73         15.92         3.67         1.74         1.93         4.28         6.21         9.71           25         4.94         16.18         3.68         1.75         1.94         4.41         6.35         9.83           26         5.17         16.46         3.68         1.75         1.94         4.63         6.56         9.89           27         5.40         16.75         3.68         1.75         1.94         4.84         6.78         9.97           28         5.65         17.06         3.68         1.75         1.94         5.06         7.00         10.06           29         5.91         17.38         3.70         1.75         1.95         5.27         7.22         10.17           30         6.19         17.73         3.70         1.75         1.95         5.49         7.44         10.30           31         6.48         18.10         3.70								5.66	9.34
23         4.53         15.67         3.67         1.74         1.93         4.14         6.07         9.50           24         4.73         15.92         3.67         1.74         1.93         4.28         6.21         9.71           25         4.94         16.18         3.68         1.75         1.94         4.41         6.35         9.83           26         5.17         16.46         3.68         1.75         1.94         4.63         6.56         9.89           27         5.40         16.75         3.68         1.75         1.94         4.84         6.78         9.97           28         5.55         17.06         3.68         1.75         1.94         5.06         7.00         10.06           29         5.91         17.38         3.70         1.75         1.95         5.27         7.22         10.17           30         6.19         17.73         3.70         1.75         1.95         5.49         7.44         10.30           31         6.48         18.10         3.70         1.75         1.96         5.71         7.65         10.45           32         6.80         18.50         3.71									9.41
24         4.73         15.92         3.67         1.74         1.93         4.28         6.21         9.71           25         4.94         16.18         3.68         1.75         1.94         4.41         6.35         9.83           26         5.17         16.46         3.68         1.75         1.94         4.63         6.56         9.89           27         5.40         16.75         3.68         1.75         1.94         4.84         6.78         9.97           28         5.65         17.06         3.88         1.75         1.94         5.06         7.00         10.06           29         5.91         17.38         3.70         1.75         1.95         5.27         7.22         10.17           30         6.19         17.73         3.70         1.75         1.95         5.49         7.44         10.30           31         6.48         18.10         3.70         1.75         1.95         5.71         7.55         10.45           32         6.80         18.50         3.71         1.76         1.95         5.92         7.87         10.62           33         7.13         18.92         3.71				•				5.94	9.50
25								6.07	9.60
26         5.17         16.46         3.68         1.76         1.94         4.63         6.56         9.89           27         5.40         16.75         3.68         1.75         1.94         4.84         6.78         9.97           28         5.65         17.06         3.68         1.75         1.94         5.06         7.00         10.06           29         5.91         17.38         3.70         1.75         1.95         5.27         7.22         10.17           30         6.19         17.73         3.70         1.75         1.95         5.49         7.44         10.30           31         6.48         18.10         3.70         1.75         1.95         5.71         7.65         10.45           32         6.80         18.50         3.71         1.76         1.95         5.92         7.87         10.62           33         7.13         18.92         3.71         1.76         1.95         6.14         8.09         10.83           34         7.49         19.36         3.72         1.76         1.96         6.36         8.31         11.05           35         7.87         19.84         3.72 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>6,21</td> <td>9.71</td>								6,21	9.71
27         5.40         16.75         3.68         1.75         1.94         4.84         6.78         9.97           28         5.65         17.06         3.68         1.75         1.94         6.06         7.00         10.06           29         5.91         17.38         3.70         1.75         1.95         5.27         7.22         10.17           30         6.19         17.73         3.70         1.75         1.95         5.49         7.44         10.30           31         6.48         18.10         3.70         1.75         1.95         5.71         7.55         10.45           32         6.80         18.50         3.71         1.76         1.95         5.92         7.87         10.62           33         7.13         18.92         3.71         1.76         1.95         6.14         8.09         10.83           34         7.49         19.36         3.72         1.76         1.96         6.35         8.31         11.05           35         7.87         19.84         3.72         1.76         1.96         6.57         8.53         11.31           36         8.27         20.34         3.72 </td <td></td> <td></td> <td>١</td> <td></td> <td></td> <td></td> <td>4.41</td> <td>6.35</td> <td>9.83</td>			١				4.41	6.35	9.83
28         5.65         17.06         3.68         1.76         1.94         5.06         7.00         10.06           29         5.91         17.38         3.70         1.75         1.95         5.27         7.22         10.17           30         6.19         17.73         3.70         1.75         1.95         5.49         7.44         10.30           31         6.48         18.10         3.70         1.76         1.95         5.71         7.65         10.45           32         6.80         18.50         3.71         1.76         1.95         5.92         7.87         10.62           33         7.13         18.92         3.71         1.76         1.95         6.14         8.09         10.83           34         7.49         19.36         3.72         1.76         1.96         6.35         8.31         11.05           35         7.87         19.84         3.72         1.76         1.96         6.57         8.53         11.31           36         8.27         20.34         3.72         1.76         1.96         6.91         8.87         11.47           37         8.69         20.87         3.73<						1.94	4.63	6.56	9.89
29 5.91 17.38 3.70 1.75 1.95 5.27 7.22 10.17 30 6.19 17.73 3.70 1.75 1.95 5.49 7.44 10.30 31 6.48 18.10 3.70 1.75 1.95 5.71 7.65 10.45 32 6.80 18.50 3.71 1.76 1.95 5.92 7.87 10.62 33 7.13 18.92 3.71 1.76 1.95 6.14 8.09 10.83 34 7.49 19.36 3.72 1.76 1.96 6.35 8.31 11.05 35 7.87 19.84 3.72 1.76 1.96 6.57 8.53 11.31 36 8.27 20.34 3.72 1.76 1.96 6.91 8.87 11.47 37 8.69 20.87 3.73 1.77 1.96 7.25 9.22 11.65 38 9.14 21.43 3.73 1.77 1.96 7.25 9.22 11.65 39 9.62 22.03 3.74 1.77 1.96 7.60 9.56 11.87 39 9.62 22.03 3.74 1.77 1.97 7.94 9.91 12.12 40 10.13 22.66 3.74 1.77 1.97 7.94 9.91 12.12 40 10.13 22.66 3.74 1.77 1.97 7.94 9.91 12.12 40 10.13 22.66 3.74 1.77 1.97 8.28 10.25 12.41 41 10.66 23.33 3.76 1.78 1.98 8.62 10.60 12.73 42 11.23 24.04 3.76 1.78 1.98 8.96 10.94 13.09 43 11.83 24.78 3.77 1.78 1.98 9.31 11.29 13.49 44 12.46 25.58 3.77 1.78 1.98 9.31 11.29 13.49						1.94	4.84	6.78	9.97
30       6.19       17.73       3.70       1.75       1.95       5.49       7.44       10.30         31       6.48       18.10       3.70       1.75       1.95       5.71       7.65       10.45         32       6.80       18.50       3.71       1.76       1.95       5.92       7.87       10.62         33       7.13       18.92       3.71       1.76       1.95       6.14       8.09       10.83         34       7.49       19.36       3.72       1.76       1.96       6.35       8.31       11.06         35       7.87       19.84       3.72       1.76       1.96       6.57       8.53       11.31         36       8.27       20.34       3.72       1.76       1.96       6.91       8.87       11.47         37       8.69       20.87       3.73       1.77       1.96       7.25       9.22       11.65         38       9.14       21.43       3.73       1.77       1.96       7.60       9.56       11.87         39       9.62       22.03       3.74       1.77       1.97       7.94       9.91       12.12         40       10.13 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>1.94</td> <td>5.06</td> <td>7.00</td> <td>10.06</td>						1.94	5.06	7.00	10.06
31         6.48         18.10         3.70         1.75         1.95         5.71         7.65         10.30           32         6.80         18.50         3.71         1.76         1.95         5.92         7.87         10.62           33         7.13         18.92         3.71         1.76         1.95         6.14         8.09         10.83           34         7.49         19.36         3.72         1.76         1.96         6.35         8.31         11.05           35         7.87         19.84         3.72         1.76         1.96         6.57         8.53         11.31           36         8.27         20.34         3.72         1.76         1.96         6.91         8.87         11.47           37         8.69         20.87         3.73         1.77         1.96         7.25         9.22         11.65           38         9.14         21.43         3.73         1.77         1.96         7.60         9.56         11.87           39         9.62         22.03         3.74         1.77         1.97         7.94         9.91         12.12           40         10.13         22.66         3.74						1.95	5.27	7.22	10.17
32         6.80         18.50         3.71         1.76         1.95         5.92         7.87         10.62           33         7.13         18.92         3.71         1.76         1.95         6.14         8.09         10.83           34         7.49         19.36         3.72         1.76         1.96         6.35         8.31         11.05           35         7.87         19.84         3.72         1.76         1.96         6.57         8.53         11.31           36         8.27         20.34         3.72         1.76         1.96         6.91         8.87         11.47           37         8.69         20.87         3.73         1.77         1.96         7.25         9.22         11.65           38         9.14         21.43         3.73         1.77         1.96         7.60         9.56         11.87           39         9.62         22.03         3.74         1.77         1.97         7.94         9.91         12.12           40         10.13         22.66         3.74         1.77         1.97         8.28         10.25         12.41           41         10.66         23.33         3.					1.75	1.95	5.49	7.44	10.30
33 7.13 18.92 3.71 1.76 1.95 6.14 8.09 10.83 34 7.49 19.36 3.72 1.76 1.96 6.35 8.31 11.05 35 7.87 19.84 3.72 1.76 1.96 6.57 8.53 11.31 36 8.27 20.34 3.72 1.76 1.96 6.91 8.87 11.47 37 8.69 20.87 3.73 1.77 1.96 7.25 9.22 11.65 38 9.14 21.43 3.73 1.77 1.96 7.60 9.56 11.87 39 9.62 22.03 3.74 1.77 1.97 7.94 9.91 12.12 40 10.13 22.66 3.74 1.77 1.97 7.94 9.91 12.12 41 10.66 23.33 3.76 1.78 1.98 8.62 10.60 12.73 42 11.23 24.04 3.76 1.78 1.98 8.96 10.94 13.09 43 11.83 24.78 3.77 1.78 1.98 9.31 11.29 13.49 44 12.46 25.58 3.77 1.78 1.98 9.55 11.63 13.94					1.75	1.95	5.71	7.65	10.45
34         7.49         19.36         3.72         1.76         1.96         6.35         8.31         11.05           35         7.87         19.84         3.72         1.76         1.96         6.57         8.53         11.31           36         8.27         20.34         3.72         1.76         1.96         6.91         8.87         11.47           37         8.69         20.87         3.73         1.77         1.96         7.25         9.22         11.65           38         9.14         21.43         3.73         1.77         1.96         7.60         9.56         11.87           39         9.62         22.03         3.74         1.77         1.97         7.94         9.91         12.12           40         10.13         22.66         3.74         1.77         1.97         8.28         10.25         12.41           41         10.66         23.33         3.76         1.78         1.98         8.62         10.60         12.73           42         11.23         24.04         3.76         1.78         1.98         8.96         10.94         13.09           43         11.83         24.78 <t< td=""><td></td><td></td><td></td><td></td><td>1.76</td><td>1.95</td><td>5.92</td><td>7.87</td><td>10.62</td></t<>					1.76	1.95	5.92	7.87	10.62
35 7.87 19.84 3.72 1.76 1.96 6.57 8.53 11.05 36 8.27 20.34 3.72 1.76 1.96 6.91 8.87 11.47 37 8.69 20.87 3.73 1.77 1.96 7.25 9.22 11.65 38 9.14 21.43 3.73 1.77 1.96 7.60 9.56 11.87 39 9.62 22.03 3.74 1.77 1.97 7.94 9.91 12.12 40 10.13 22.66 3.74 1.77 1.97 7.94 9.91 12.12 41 10.66 23.33 3.76 1.78 1.98 8.62 10.60 12.73 42 11.23 24.04 3.76 1.78 1.98 8.96 10.94 13.09 43 11.83 24.78 3.77 1.78 1.98 9.31 11.29 13.49 44 12.46 25.58 3.77 1.78 1.98 9.55 11.63 13.94					1.76	1.95	6.14	8.09	10.83
36 8.27 20.34 3.72 1.76 1.96 6.91 8.87 11.47 37 8.69 20.87 3.73 1.77 1.96 7.25 9.22 11.65 38 9.14 21.43 3.73 1.77 1.96 7.60 9.56 11.87 39 9.62 22.03 3.74 1.77 1.97 7.94 9.91 12.12 40 10.13 22.66 3.74 1.77 1.97 8.28 10.25 12.41 41 10.66 23.33 3.76 1.78 1.98 8.62 10.60 12.73 42 11.23 24.04 3.76 1.78 1.98 8.96 10.94 13.09 43 11.83 24.78 3.77 1.78 1.98 9.31 11.29 13.49 44 12.46 25.58 3.77 1.78 1.98 9.65 11.63 13.94					1.76	1.96	6.35	8,31	11.05
37 8.69 20.87 3.73 1.77 1.96 7.25 9.22 11.65 38 9.14 21.43 3.73 1.77 1.96 7.60 9.56 11.87 39 9.62 22.03 3.74 1.77 1.97 7.94 9.91 12.12 40 10.13 22.66 3.74 1.77 1.97 8.28 10.25 12.41 41 10.66 23.33 3.76 1.78 1.98 8.62 10.60 12.73 42 11.23 24.04 3.76 1.78 1.98 8.96 10.94 13.09 43 11.83 24.78 3.77 1.78 1.98 9.31 11.29 13.49 44 12.46 25.58 3.77 1.78 1.98 9.65 11.63 13.94				3.72	1.76	1.96	6.57	8,53	11.31
38         9.14         21.43         3.73         1.77         1.96         7.60         9.56         11.87           39         9.62         22.03         3.74         1.77         1.97         7.94         9.91         12.12           40         10.13         22.66         3.74         1.77         1.97         8.28         10.25         12.41           41         10.56         23.33         3.76         1.78         1.98         8.62         10.60         12.73           42         11.23         24.04         3.76         1.78         1.98         8.96         10.94         13.09           43         11.83         24.78         3.77         1.78         1.98         9.31         11.29         13.49           44         12.46         25.58         3.77         1.78         1.98         9.65         11.63         13.94			20.34	3.72	1.76	1.96	6.91	8.87	11.47
39 9.62 22.03 3.74 1.77 1.97 7.94 9.91 12.12 40 10.13 22.66 3.74 1.77 1.97 8.28 10.25 12.41 41 10.66 23.33 3.76 1.78 1.98 8.62 10.60 12.73 42 11.23 24.04 3.76 1.78 1.98 8.96 10.94 13.09 43 11.83 24.78 3.77 1.78 1.98 9.31 11.29 13.49 44 12.46 25.58 3.77 1.78 1.98 9.65 11.63 13.94				3.73	1.77	1.96	7.25	9.22	11.65
40 10.13 22.66 3.74 1.77 1.97 8.28 10.25 12.41 41 10.66 23.33 3.76 1.78 1.98 8.62 10.60 12.73 42 11.23 24.04 3.76 1.78 1.98 8.96 10.94 13.09 43 11.83 24.78 3.77 1.78 1.98 9.31 11.29 13.49 44 12.46 25.58 3.77 1.78 1.98 9.65 11.63 13.94				3.73	1.77	1.96	7.60	9.56	11.87
41 10.56 23.33 3.76 1.78 1.98 8.62 10.60 12.73 42 11.23 24.04 3.76 1.78 1.98 8.96 10.94 13.09 43 11.83 24.78 3.77 1.78 1.98 9.31 11.29 13.49 44 12.46 25.58 3.77 1.78 1.98 9.65 11.63 13.94					1.77	1.97	7.94	9.91	
41     10.66     23.33     3.76     1.78     1.98     8.62     10.60     12.73       42     11.23     24.04     3.76     1.78     1.98     8.96     10.94     13.09       43     11.83     24.78     3.77     1.78     1.98     9.31     11.29     13.49       44     12.46     25.58     3.77     1.78     1.98     9.65     11.63     13.94				3.74	1.77	1.97	8.28	10.25	
42     11.23     24.04     3.76     1.78     1.98     8.96     10.94     13.09       43     11.83     24.78     3.77     1.78     1.98     9.31     11.29     13.49       44     12.46     25.58     3.77     1.78     1.98     9.65     11.63     13.94				3.76	1.78	1.98	8,62	10.60	
43     11.83     24.78     3.77     1.78     1.98     9.31     11.29     13.49       44     12.46     25.58     3.77     1.78     1.98     9.65     11.63     13.94				3.76	1.78	1.98	8.96	10.94	
44 12.46 25.58 3.77 1.78 1.98 9.65 11.63 13.94				3.77	1.78	1.98	9.31	11.29	
45 42 42 20 44 27			25.58	3.77	1.78	1.98	9.65		
	45	13.13	26.41	3.78	1.79	1.99	9.99	11,98	

Table 2

MALE NONTOBACCO

	MALE MONTO							
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
					(2) - (3)		(4) + (5)	(1) - (6)
	METICAL	MAXIMUM	FIRST	AVERAGE	INITIAL			., .,
LOOL IT	NET LEVEL	FIRST YEAR	YEAR	RENEWAL	ACQUIS	MUMIXAM		UNUSED
ISSUE	ANNUAL	EXPENSE	EXPENSE	EXPENSE	EXPENSE	SURRENDER	TOTAL	EXPENSE
AGE	PREMIUM	ALLOWANCE	CHARGE	CHARGE	CHARGE	CHARGE	CHARGES	ALLOWANCE
46 47	13.83	27.29	3.78	1.79	1.99	10.66	12.65	14.65
	14.58	28.23	3.79	1.80	2.00	11.32	13.32	14,91
48 <b>49</b>	15.37	29.21	3.79	1.80	2.00	11.99	13,98	15.23
50	16.22	30.27	3.80	1.80	2.00	12.65	14.66	15.62
51	17.12	31.40	3.82	1.81	2,01	13.32	15.33	16.08
51 52	18.09	32.61	3.83	1.81	2.01	13.99	16.00	16.61
52 53	19.12	33,90	3.83	1.81	2.01	14.65	16.67	17.23
53 54	20.22	35.27	3.84	1.82	2.02	15.32	17.34	17.93
55	21.39	36.73	3.85	1.82	2.03	15.98	18.01	18.72
56	22.63	38.29	3.86	· 1.83	2.03	16.65	18.68	19.60
56 57	23.94	39.93	4.10	1.94	2.16	17.59	19.75	20.18
57 58	25.34	41.67	4.12	1.95	2.17	18.52	20.69	20.98
. 59	26.82	43.52	4.13	1.96	2.17	19.46	21.63	21.89
60	28.41 30.11	45.51	4.14	1.96	2.18	20.39	22.57	22.94
61	31.93	47.64	4.16	1.97	2.19	21.33	23.52	24.12
62	33.87	49,91	· 4.18	1.98	2.20	22.39	24.59	25.32
63	35.94	52.34	4.20	1.99	2.21	22.50	24.71	27.63
64	38.12	54.92	4.21	2.00	2.22	22.50	24.72	30.20
65	40.45	57.66	4,24	2.01	2.23	22.50	24.73	32.93
66	42.94	60.00 60.00	4.26	2.02	2.24	22.50	24.74	35.26
67	45.59	60.00	4.40	2.09	2.32	22.50	24.82	35.18
68	48.46	60.00	4.44	2.10	2.34	22.50	24.84	35.16
69	51.56	60.00	4.48 4.51	2.12	2.36	22.50	24.86	35.14
70	54.93	60.00	4.51 4.56	2.14	2.37	22.50	24.87	35.13
71	58.57		4.56 4.62	2.16	2.40	22.50	24.90	35.10
72	62.53	60.00 60.00	4.68	2.19	2.43	22.50	24.93	35.07
73	66.78	60.00	4.76	2.22	2.46	22.50	24.96	35.04
74	71.35	60.00	4.87	2.26	2,51	22.50	25.01	34.99
75	76.31	60.00	5.00	2.31	2.56	22,50	25.06	34.94
76	81.70	60.00	5.21	2.37 2.47	2.63	22.50	25.13	34.87
77	87.56	60.00	5,52	2.61	2.74	22.50	25.24	34.76
78	93.94	60.00	6.12	2.90	2.91	22.50	25.41	34.59
79	100.84	60.00	7.81	3.70	3.22	22.50	25.72	34.28
80	108.27	60.00	9.49	4.50	4.11	22.50	26.61	33.39
81	116.26	60.00	11.18	5.30	5.00	22.50	27.50	32.50
82	124.80	60.00	12.86	6.09	5.89 6.77	22.50	28.39	31.61
83	133.98	60.00	14.56	6.89	7.66	22.50	29.27	30.73
84	143.89	60.00	16.24	7.69	8.55	22.50	30.16	29.84
85	154.53	60.00	17.93	8.49	9.44	22.50	31.05	28.95
				0.43	9.44	22.50	31.94	28.06

Table 2

		MALE PREFERE	RED TOBACCO						
			(1)	(2)	(3)	(4) (2) + (3)	(5)	(6) (3) + (4)	(7)
ļ	SSUE AGE	NET LEVEL ANNUAL PREMIUM	MAXIMUM FIRST YEAR EXPENSE ALLOWANCE	FIRST YEAR EXPENSE CHARGE	AVERAGE RENEWAL EXPENSE CHARGE	INITIAL ACQUIS EXPENSE CHARGE	MAXIMUM SURRENDER CHARGE	TOTAL CHARGES	UNUSED EXPENSE ALLOWANCE
	. 0	. 246	40.74	4'44					
	1	2.16	12,71	3.90	1.85	2.05	2,25	4.30	8.40
	2	2.32	12.79	3.90	1.85	2.05	2.39	4.44	8.35
	3	2.42	12.90 13.03	3.90 3.90	1.85	2.05	2.52	4.57	8.33
	4	2.53	13.17	3,90	1.85	2.05	2.65	4.70	8.33
	5	2.66	13.32	3,90 3,90	1.85	2.05	2.78	4.83	8.33
	6	2.79	13.49	3.90 3.90	1.85	2.05	2.92	4.97	8.35
	7	2.93	13,66	3.90	1.85	2.05	3,05	5.10	8.38
	8	3.07	13.84	3,90	1.85	2.05	3.18	5.23	8.43
	9	3.22	14.03	3.90	1.85 1.85	2.05	3.31	5,36	8.47
	10	3.38	14.23	3,90	1.85	2.05	3.45	5.50	8.53
	11	3.55	14.44	3,90	1.85	2.05	3.58	5.63	8.59
	12	3.73	14.66	3.90	1.85	2.05 2.05	3.71	5.76	8.68
	13	3,92	14.89	3.90	1.85	2.05	3.84	5,90	8.77
	14	4.11	15.14	3.90	1.85	2.05	3.98	6.03	8.86
	15	4.31	15.39	3,90	1.85	2.05	4.11 4.24	6.17	8.97
	16	4.51	15.64	3.90	1.85	2.05	4.37	6.29	9.09
	17	4.72	15.90	3.90	1.85	2.05	4.51	6.43 6.56	9.21
	18	4.94	16.17	3.90	1.85	2.05	4.64	6.70	9.34
	19	5.16	16,45	3,90	1,85	2.05	4.77	6.82	9.47
	20	5.40	16.75	3,90	1.85	2.05	4.32	6.37	9.63 10.37
	21	5.63	17.04	3.90	1.85	2.05	4.64	6.70	10.34
	22	5.88	17.35	3.90	1.85	2.05	4.97	7.02	10.33
	23	6.13	17.67	3.91	1.85	2,06	5.29	7.35	10.32
	24	6.40	18.00	3.91	1.85	2.06	5.62	7.67	10.33
	25	6.68	18.36	3.92	1.86	2.07	5,94	8.01	10.35
	26	6.98	18.72	3.92	1.86	2.07	6.23	8.29	10.43
	27	7.29	19.11	3.92	1.86	2.07	6,52	8.58	10.53
	28	7.61	19.51	3,94	1.86	2.07	6.80	8.88	10.64
	29	7.96	19.94	3.94	1.86	2.07	7.09	9.16	10.78
	30	8.32	20.40	3.95	1.87	2.08	7.38	9,46	10.94
	31	8.71	20.89	3.95	1,87	2.08	7.67	9.75	11.15
	32	9.13	21.41	3,96	1.88	2,08	7.96	10,04	11.37
	33	9,58	21.97	3.96	1.88	2.08	8.24	10.33	11.64
	34	10.05	22.56	3.96	1.88	2.08	8.53	10.62	11.95
	35	10.55	23,19	3.97	1.88	2.09	8.82	10.91	12.28
	36	11.08	23.86	3.97	1.88	2.09	9.33	11.42	12.43
	37	11.65	24.56	3.98	1.89	2.10	9.85	11.94	12,62
	38	12.25	25.31	3.98	1.89	2.10	10.36	12.46	12.86
	39	12.89	26.11	4.00	1.89	2.10	10.87	12.98	13.13
	40	13.56	26.95	4.00	1.89	2.10	11.39	13,49	13.46
	41	14.27	27.84	4.01	1.90	2.11	11.90	14.01	13.83
	42	15.02	28.78	4.01	1.90	2.11	12.41	14.52	14.25
	43	15.81	29.76	4.02	1.90	2.12	12.92	15.04	14.73
	44	16.64	30.81	4.03	1.91	2.12	13.44	15.56	15.25
	45	17.52	31.90	4.03	1.91	2.12	13.95	16.07	15.83

Table 2

	M	ALE PREFERE	RED TOBACCO						
			(1)	(2)	(3)	$\frac{(4)}{(2)+(3)}$	(5)	(6) (3) + (4)	(7)
		NET LEVEL	MAXIMUM FIRST YEAR	FIRST YEAR	AVERAGE RENEWAL	INITIAL ACQUIS	MAXIMUM	(9) / (4)	UNUSED
ISS	UE	ANNUAL	EXPENSE	EXPENSE	EXPENSE	EXPENSE	SURRENDER	TOTAL	EXPENSE
A	GE	PREMIUM	ALLOWANCE	CHARGE	CHARGE	CHARGE	CHARGE	CHARGES	
				,	OH WOL	OTATOL	CHARGE	CHARGES	ALLOWANCE
	46	18.44	33.04	4.04	1.92	2.13	14.81	16.93	16.11
	47	19,40	34.25	4.06	1.92	2.13	15.66	17.79	16.46
	48	20.42	35,53	4.07	1.93	2.14	16.52	18.66	16.87
	49	21.52	36.90	4.07	1.93	2.14	17.37	19.51	17.38
	50	22.69	38,36	4.08	1.93	2.15	18.23	20,37	17.99
	51	23.94	39.92	4.09	1.94	2.15	19.08	21.23	18.69
	52	25.27	41.59	4.10	1.94	2.16	19.94	22.10	19.50
	53	26.69	43,36	4.12	1.95	2.17	20.79	22.96	20.40
	54	28.18	45,23	4.13	1.96	2.17	21.65	23.82	21.41
	55	29.76	47.19	4.14	1.96	2.18	22.50	24.68	22.52
	56	31.41	49.26	4.39	2.08	2.31	22.50	24.81	24.45
	57	33.14	51.43	4.40	2.09	2.32	22.50	24.82	26.61
	58	34.98	53.72	4.43	2.10	2.33	22.50	24.83	28.89
	59	36.93	56.17	4.44	2.10	2.34	22.50	24.84	31.33
•	60	39.03	58.79	4.46	2.11	2.35	22.50	24,85	33.94
	61	41.26	60.00	4.48	2.12	2.36	22.50	24.86	35.14
•	62	43.61	60.00	4,50	2.13	2.37	22.50	24.87	35.13
	63	46.08	60,00	4.52	2.14	2.38	22.50	24.88	35.12
•	64	48.66	60.00	4.55	2.15	2.39	22.50	24.89	35.11
	55	51.37	60.00	4.58	2.17	2.41	22.50	24.91	35.09
	66	54.22	60.00	4.61	2.18	2.43	22.50	24.93	35.07
	57	57.25	60.00	4.64	2.20	2.44	22.50	24.94	35.06
	58	60.50	60.00	4.69	2.22	2.47	22.50	24.97	35.03
.€	59	64.01	60.00	4.74	2.25	2.49	22.50	24,99	35,01
.7	70	67.82	60.00	4.79	2.27	2.52	22.50	25.02	34,98
7	1	71.95	60.00	4.85	2.30	2.55	22.50	25.05	34.95
	2	76.43	60,00	4.93	2.34	2.60	22.50	25.10	34.90
	3	81.20	60.00	5.03	2.38	2.65	22.50	25.15	34.85
	4	86.32	60.00	5.15	2.44	2.71	22.50	25.21	34.79
	5	91.88	60.00	5.32	2.52	2.80	22.50	25.30	34.70
7		97.89	60.00	5.54	2.63	2.92	22.50	25.42	34.58
7		104.41	60.00	5.92	2,80	3.11	22.50	25.61	34.39
7		111,47	60.00	6.62	3.14	3.49	22,50	25.99	34.01
7		119.04	60,00	8.60	4.08	4.53	22.50	27.03	32.97
8		127.11	60.00	10.57	5.01	5.56	22.50	28.06	31.94
8		135.73	60,00	12.55	5.95	6.61	22.50	29.11	30.89
8.		144.84	60.00	14.53	6.88	7.65	22,50	30.15	29.85
8		154.60	60.00	16.51	7.82	8.69	22.50	31.19	28.81
8		165.12	60.00	18.49	8.76	9.73	22.50	32.23	27.77
8	5	176.46	60.00	20.46	9.69	10.77	22.50	33.27	26.73

Table 2

MALE TOBACCO

	MALE TODAGO	(1)	(2)	(3)	(4) (2) + (3)	(5)	(6)	(7)
ISSUE AGE		MAXIMUM FIRST YEAR EXPENSE ALLOWANCE	FIRST YEAR EXPENSE CHARGE	AVERAGE RENEWAL EXPENSE CHARGE	INITIAL ACQUIS EXPENSE CHARGE	MAXIMUM SURRENDER CHARGE	(3) + (4)  TOTAL  CHARGES	UNUSED EXPENSE ALLOWANCE
. 0	2.16	12.71	3.90	1.85	2.05	2,25	4.30	
1	2.23	12.79	3.90	1.85	2.05	2.39	4.44	8.40 8.35
2	2.32	12.90	3.90	1.85	2.05	2.52	4.57	8.33
3	2.42	13.03	3.90	1.85	2.05	2.65	4.70	8.33
4	2.53	13.17	3.90	1.85	2.05	2.78	4.83	8.33
5	2.66	13.32	3.90	1.85	2.05	2,92	4.97	8.35
6	2.79	13,49	3.90	1.85	2.05	3.05	5.10	8.38
7	2.93	13.66	3.90	1.85	2.05	3.18	5,23	8.43
8	3.07	13.84	3.90	1.85	2.05	3,31	5.36	8.47
9	3.22	14.03	3.90	1,85	2.05	3.45	5.50	8.53
10	3.38	14.23	3.90	1.85	2.05	3.58	5.63	8.59
11	3.55	14.44	3.90	1.85	2.05	3.71	5.76	8.68
12	3.73	14.66	3.90	1.85	2.05	3.84	5,90	8.77
13	3.92	14.89	3.90	1.85	2.05	3.98	6.03	8.86
14	4.11	15.14	3.90	1.85	2.05	4.11	6.17	8,97
15	4.31	15.39	3.90	1.85	2.05	4.24	6.29	9.09
16	4.51	15.64	3.90	1.85	2.05	4.37	6.43	9.21
17	4.72	15.90	3.90	1.85	2.05	4.51	6.56	9,34
18	4.94	16.17	3.90	1.85	2.05	4.64	6.70	9.47
19	5.16	16.45	3.90	1.85	2.05	4.77	6.82	9.63
20	5.40	16.75	3.90	1.85	2.05	4.91	6.96	9.79
21	5.63	17.04	3.90	1.85	2.05	5.20	7.25	9,78
. 22	5,88	17.35	3.90	1.85	2.05	5.50	7.55	9.79
23	6.13	17.67	3.91	1.85	2.06	5.80	7.85	9.81
24	6.40	18.00	, 3.91	1.85	2.06	6.09	8.15	9.85
25	6.68	\ 18.36	3,92	1.86	2.07	6.39	8.46	9.90
26	6.98	. 18.72	3.92	1.86	2.07	6.74	8.81	9.92
27	7.29	19.11	3.92	1.86	2.07	7.09	9.16	9.95
28	7.61	19.51	3.94	1.86	2,07	7.44	9.51	10.00
29	7.96	19.94	3.94	1.86	2.07	7.79	9.87	10.08
30 31	8.32	20.40	3.95	1.87	2.08	8.15	10.22	10.18
31	8.71	20,89	3,95	1.87	2.08	8.50	10.57	10.32
32	9.13	21.41	3.96	1.88	2.08	8.85	10.93	10.48
34	9.58	21.97	3.96	1.88	2.08	9.20	11.28	10.69
35	10.05	22,56	3.97	1.88	2.09	9.55	11.64	10.92
36	10.55	23.19	3.97	1.88	2.09	9.90	11.99	11.20
37	1,1.08 11.65	23.86	3.98	1.89	2.10	10.53	12.63	11.23
38		24.56	3.98	1.89	2.10	11.16	13.26	11.31
39	12.25 1.2.89	25.31	4.00	1.89	2.10	11.79	13.89	11.42
40	13.56	26.11	4.00	1.89	2.10	12.42	14.52	11.58
41	14.27	26.95 27.84	4.01	1.90	2.11	13.05	15.16	11.79
42	15.02		4.02	1.90	2.12	13.68	15,80	12.04
43	15.02	28.78 29.76	4.02	1.90	2.12	14.31	16.43	12.35
44	16.64	29.76 30.81	4.03	1.91	2.12	14.94	17.06	12.70
45	17.52	30.81 31.90	4.04	1.92	2.13	15.57	17.70	13.11
	17.02	31,50	4.04	1.92	2.13	16,20	18.33	13.57

Table 2

MALE TOBACCO

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
ISSUE AGE	NET LEVEL ANNUAL PREMIUM	MAXIMUM FIRST YEAR EXPENSE ALLOWANCE	FIRST YEAR EXPENSE CHARGE	AVERAGE RENEWAL EXPENSE CHARGE	(2) + (3) INITIAL ACQUIS EXPENSE CHARGE	MAXIMUM SURRENDER CHARGE	(3) + (4)  TOTAL  CHARGES	UNUSED EXPENSE ALLOWANCE
46	18.44	33.04	4.06	1.92	2.13	17.19	19.32	
47	19.40	34.25	4.07	1.93	2.14	18.18	20.32	13.72
48	20.42	35,53	4.08	1.93	2.15	19.17	21.32	13.93 14.21
49	21.52	36.90	4.09	1.94	2,15	20.16	22.31	14.58
50	22.69	38,36	4.10	1.94	2.16	21.15	23,31	15.05
51	23.94	39.92	4.10	1.94	2.16	22.14	24.30	15.62
52	25.27	41.59	4.13	1.96	2.17	22.50	24.67	
53	26.69	43.36	4.14	1.96	2.18	22.50	24.68	16.92 18.68
54	28.18	45.23	4.15	1.97	2.19	22.50	24.69	20.54
55	29,76	47.19	4.16	1.97	2.19	22.50	24.69	22.50
56	31.41	49.26	4.54	2.15	2.39	22.50	24.89	24.37
57	33.14	51.43	4.56	2.16	2.40	22.50	24.90	26.53
58	34,98	53.72	4.57	2.17	2.41	22,50	24.91	28.81
59	36.93	56.17	4.60	2.18	2.42	22,50	24.92	31.25
60	39.03	58.79	4.62	2.19	2.43	22.50	24.93	33,85
61	41.26	60.00	4.63	2.19	2.44	22.50	24.94	35.06
62	43.61	60.00	4.66	2.21	2.45	22.50	24.95	35.05
63	46.08	60.00	4.69	2.22	2.47	22.50	24.97	35.03
64	48.66	60.00	4.72	2.23	2.48	22.50	24.98	35.02
65	51.37	60.00	4.75	2.25	2.50	22.50	25.00	35.00
66	54.22	60.00	4.79	2.27	2.52	22.50	25.02	34.98
67	57.25	60.00	4.82	2.29	2.54	22.50	25.04	34.96
68	60.50	60.00	4.87	2.31	2.56	22.50	25.06	34.94
69	64.01	60.00	4.92	2,33	2.59	22.50	25.09	34,91
70	67.82	60.00	4.98	2.36	2.62	22.50	25.12	34.88
71 72	71.95	60.00	5.05	2.39	2.66	22.50	25.16	34.84
73	76.43	60.00	5.15	2.44	2.71	22.50	25.21	34.79
74	81.20	60.00	5.26	2.49	2.77	22.50	25.27	34.73
75	86.32	60.00	5.39	2.55	2.84	22.50	25.34	34.66
76	91.88	60.00	5.58	2.64	2.94	22.50	25.44	34,56
77	97.89 104.41	60.00	5.84	2.77	3.08	22.50	25.58	34.42
78	111,47	60.00	6.25	2.96	3.29	22.50	25.79	34.21
79	119.04	60.00	7.04	3.34	3.71	22.50	26.21	33.79
80	127.11	60.00	9.28	4.39	4.88	22.50	27.38	32.62
81	135.73	60.00	11.51	5.45	6.06	22.50	28.56	31.44
82	144.84	60.00 60.00	13.73	6.50	7.23	22.50	29.73	30.27
83	154.60	60.00	15.96	7.56	8.40	22.50	30.90	29.10
84	165.12	60.00	18,18	8.61	9.57	22.50	32.07	27.93
85	176.46	60.00	20.41	9.67	10.74	22.50	33.24	26.76
	170.40	00.00	22.64	10.73	11.92	22.50	34.42	25.58

Table 2

FEMALE PREFERRED PLUS NONTOBACCO

	the terms of the t	(1)	(2)	(3)	(4) (2) + (3)	(5)	(6) (4) + (5)	(7) (1) - (6)
ISSUE	NET LEVEL ANNUAL	MAXIMUM FIRST YEAR EXPENSE	FIRST YEAR EXPENSE	AVERAGE RENEWAL EXPENSE	INITIAL ACQUIS EXPENSE	MAXIMUM SURRENDER	TOTAL	UNUSED EXPENSE
AGE	PREMIUM	ALLOWANCE	CHARGE	CHARGE	CHARGE	CHARGE	CHARGES	ALLOWANCE
. 0	1.36	11.70	3.67	1.74	1,93	1.80	3.73	7,96
1	1.40	11.75	3.67	1.74	1.93	1.93	3.86	7.89
. 2	1.46	11.82	3.67	1.74	1.93	2.04	3.98	7.85
. 3	1.52	11.90	3.67	1.74	. 1.93	2.17	4.10	7.80
4	1.59	11.99	3.67	1.74	1.93	2.29	4.22	7.77
5	1,66	12.08	3.67	1.74	1.93	2.41	4.34	7.73
. 6	1.74	12.17	3.67	1.74	1,93	2.53	4.46	7.71
7	1.82	12.28	3.67	1.74	1,93	2.66	4.59	7.69
8	1.90	12.38	3.67	1.74	1.93	2.77	4.70	7.68
9	1.99	12.49	3.67	1.74	1.93	2.90	4.83	7.66
10	2.09	12.61	3.67	1.74	1.93	3.02	4.95	7.66
11	2.19	12.73	3.67	1.74	1.93	3.14	5.07	7.66
12	2.29	12.86	3.67	1.74	1.93	3.26	5.19	7.67
13	2.40	12.99	3.67	1.74	1.93	3.38	5.32	7.68
14	2.51	13.13	3.67	1.74	1.93	3.50	5.43	7.70
15	2.62	13,28	3.67	1.74	1.93	3,63	5.56	7.72
16	2.74	13.43	3.67	1.74	1.93	3.74	5.68	7.75
17	2.87	13.59	3.67	1.74	1.93	3.87	5.80	7.78
18	3.00	13.75	3.67	1.74	1.93	3.99	5.92	7.83
19	3.14	13.92	3.67	1.74	1.93	4.11	6.05	7.88
20	3.28	14.10	3.52	1.67	1.85	2.39	4.24	9.87
21	3.44	14.30	3.52	1.67	1.85	2.48	4.33	9.96
22	3.60	14.50	3.52	1.67	1.85	2,58	4,43	10.06
23	3.77	14.71	3.52	1.67	1.85	2.68	4.53	10.18
24	3.95	14.93	3.53	1.67	1.86	2.78	4.64	10.30
25	4.14	15.17	3.53	1,67	1.86	2.88	4.74	10.43
26	4.33	15.42	3.53	1.67	1.86	3.03	4.89	10.53
27	4.54	15.68	3,53	1.67	1.86	3.19	5.04	10.64
28	4.76	15.96	3.53	1.67	1.86	3.34	5.20	10.76
29 30	5.00	16.25	3,54	1.68	1.86	3.49	5.36	10.89
30 31	5.24 5.50	16.55	3.54	1.68	1.86	3.65	5.51	11.04
32	5.77	16.88	3.54	1,68	1.86	3.80	5,66	11.22
33	6.06	17.22	3.54	1.68	1.86	3.95	5.81	11.40
34	6.36	17.58 17.95	3.54	1.68	1.86	4.10	5,97	11.61
35	6.68	18.35	3.55	1.68	1.87	4.26	6,13	11.83
36	7.02	18.77	3.55 3.55	1.68	1.87	4.41	6.28	12.07
37	7.37	19.21	3.55	1.68	1.87	4.63	6.50	12.28
38	7.74	19.68	3,56	1.68	1.87	4.84	6.71	12.50
39	8.14	20.17	3.56	1.69	1.88	5.05	6.92	12.75
40	8.55	20.69	3,56	1.69	1.88	5.27	7.14	13.03
41	8.99	21.24	3,58	1.69 1.69	1.88	5.48	7.36	13.33
42	9.46	21.83	3.58	1.69	1.88	5.70	7.58	13.66
43	9.96	22,44	3.58	1.69	1.88	5.91	7.80	14.03
44	10.48	23.10	3.59	1.69	1.88	6.12	8.00	14.44
45	11.03	23.79	3.59	1.70	1.89	6.34	8.22	14.87
	11.00	20,13	3,09	1.70	1.89	6.55	8.44	15.35

Table 2

		(1)	(2)	(3)	(4) (2) + (3)	(5)	(6) (4) + (5)	(7) (1) - (6)
		MAXIMUM	FIRST	AVERAGE	INITIAL		(11 - (0)	(1) - (0)
	NET LEVEL	FIRST YEAR	YEAR	RENEWAL	ACQUIS	MAXIMUM		UNUSED
ISSUE	ANNUAL	EXPENSE	EXPENSE	EXPENSE	EXPENSE	SURRENDER	TOTAL	EXPENSE
AGE	PREMIUM	ALLOWANCE	CHARGE	CHARGE	CHARGE	CHARGE	CHARGES	ALLOWANCE
•								
46	11.62	24.52	3.59	1.70	1.89	6,93	8.82	15,71
47	12.24	25.30	3.60	1.71	1.89	7,31	9.20	16.10
48	12.89	26.12	3.60	1.71	1.89	7.70	9.59	16.53
49	13.58	26.98	3.61	1.71	1.90	8.07	9.97	17.00
50	14.31	27.89	3.61	1.71	1.90	8.45	10.35	17.54
51	15.08	. 28.85	3.62	1.72	1.91	8.83	10.74	18.11
52	15,89	29.86	3.62	1.72	1.91	9.21	11.11	18.75
53	16.74	30.93	3.64	1.72	1.91	9.59	11.51	19.42
54	17.64	32.05	3,64	1.72	1.91	9.97	11.89	20.17
55	18.59	33.24	3.65	1.73	1.92	10.35	12.27	20.97
56	19.59	34.49	3.90	1.85	2.05	10.89	12.94	21.55
57 58	20.65	35.81	3.90	1.85	2.05	11.43	13.48	22.33
58 50	21.76	37.20	3.91	1.85	2.06	11.97	14.03	23.17
59 60	22.94	38.68	3.92	1.86	2.07	12.51	14.58	24.10
61	24.19	40.24	3.94	1,86	2.07	13.05	15.12	25.11
62	25.51	41.89	3.95	1.87	2.08	13.82	15.89	26.00
63	26.92	43.65	3.96	1.88	2.08	14.58	16.66	26.99
64	28.42	45,53	3.97	1.88	2.09	15.35	17.44	28.09
65	30.02	47.53	3,98	1.89	2.10	16.11	18.21	29.32
66	31.73	49.66	4.00	1.89	2.10	16.88	18.98	30.69
67	33.56	51.95	4.02	1.90	2.12	18.05	20.17	31.78
68	35,51 37,61	54.39	4.04	1.92	2.13	19.23	21.36	33.03
69	39.85	57.01	4.07	1.93	2.14	20,41	22.55	34.46
70	42.26	59.82	4.09	1.94	2.15	21.59	23.74	36.07
71	44.85	60.00	4.12	1.95	2.17	22.50	24.67	35.33
72	47.63	\ 60.00	4.15	1.97	2.19	22.50	24.69	35.31
73	50.62	60.00	4.20	1.99	2.21	22.50	24.71	35.29
74	53.83	60.00 60.00	4.26	2.02	2.24	22.50	24.74	35.26
75	57.29	60.00	4.32	2.05	2.27	22.50	24.77	35.23
76	61.02	60.00	4.42	2.09	2.32	22.50	24.82	35.18
77	65.06	60.00	4.55	2.15	2.39	22.50	24.89	35.11
78	69.43	60.00	4.76	2.26	2.51	22.50	25.01	34.99
79	74.18	60.00	5.16 6.29	2.44	2.72	22.50	25.22	34.78
80	79.34	60.00	7.42	2.98	3.31	22.50	25.81	34.19
81	84,98	60.00	8.53	3.51	3.90	22.50	26.40	33,60
82	91.02	60.00	9.66	4.04	4.49	22.50	26.99	33.01
83	97.45	60.00	10.79	4.58	5.08	22.50	27.58	32.42
84	104.37	60.00	11.90	5.11	5.68	22,50	28.18	31.82
85	111.81	60.00	13.03	5.64 6.17	6.27	22.50	28.77	31.23
		V0.00	13,03	0.17	6.86	. 22.50	29.36	30.64

Table 2

	NONTOBACCO

		(1)	(2)	(3)	(4) (2) + (3)	(5)	(6) (4) + (5)	(7) (1) - (6)
		MAXIMUM	FIRST	AVERAGE	INITIAL		(1) - (0)	(1) - (0)
	NET LEVEL	FIRST YEAR	YEAR	RENEWAL	ACQUIS	MAXIMUM		UNUSED
ISSUE	ANNUAL	EXPENSE	EXPENSE	EXPENSE	EXPENSE	SURRENDER	TOTAL	EXPENSE
AGE	PREMIUM	ALLOWANCE	CHARGE	CHARGE	CHARGE	CHARGE	CHARGES	ALLOWANCE
. 0	1.36	11.70	3.67	1.74	1,93	1.80	. 272	
1	1.40	11.75	3,67	1.74	1.93	1.93	3.73	7.96
2	1.46	11.82	3.67	1.74	1.93	2.04	3.86 3.98	7.89
3	1.52	11.90	3.67	1.74	1.93	2.17	4.10	7.85
4	1.59	11.99	3.67	1.74	1,93	2.29	4.22	7.80
5	1.66	12.08	3.67	1.74	1.93	2.41	4.34	7.77
6	1.74	12.17	3.67	1.74	1.93	2.53	4.46	7.73
7	1.82	12.28	3.67	1.74	1.93	2.66	4.59	7.71
8	1.90	12.38	3.67	1.74	1.93	2.77	4.70	7.69
9	1.99	12.49	3.67	1.74	1.93	2.90	4.83	7.68
10	2.09	12.61	3.67	1.74	1.93	3.02	4.95	7.66
11	2.19	12.73	3.67	1.74	1.93	3.14	5.07	7.66 7.66
12	2.29	12.86	3.67	1.74	1.93	3.26	5.19	7.67
13	2.40	12.99	3.67	1.74	1.93	3.38	5.32	7.68
14	2.51	13.13	3.67	1.74	1.93	3.50	5.43	7.70
15	2.62	13.28	3.67	1.74	1.93	3.63	5.56	7.72
16	2.74	13.43	3.67	1.74	1.93	3.74	5.68	7.75
17	2.87	13.59	3.67	1.74	1.93	3.87	5.80	7.78
18	3.00	13.75	3.67	1.74	1.93	3.99	5.92	7.83
19	3.14	13.92	3.67	1.74	1.93	4.11	6.05	7.88
20	3.28	14.10	3.53	1.67	1.86	2.70	4.56	9.55
21	3.44	14.30	3.53	1.67	1.86	2.81	4.66	9,63
22	3.60	14.50	3.53	1.67	1.86	2.92	4.77	9,72
23	3.77	14.71	3.53	1.67	1.86	3.02	4.88	9,83
24	3.95	14.93	3.53	1.67	1.86	3.13	4.99	9.94
25	4.14	15.17	3.54	1.68	1.86	3.24	5.10	10.07
26	4.33	15.42	3.54	1.68	1.86	3.38	5.24	10.18
27	4.54	15.68	3.54	1.68	1.86	3,51	5.37	10.31
28	4.76	15.96	3:54	1.68	1.86	3,65	5,51	10.45
29	5.00	16.25	3.54	1.68	1.86	3.78	5.64	10.60
30	5.24	16.55	3.55	1.68	1.87	3.92	5.78	10.77
. 31	5.50	16.88	3.55	1.68	1.87	4.05	5.92	10.96
32	5.77	17.22	3.55	1.68	1.87	4.19	6.05	11.16
33	6.06	17.58	3.55	1.68	1.87	4.32	6.19	11.39
34	6.36	17.95	3.56	1.69	1.88	4.46	6.33	11.62
35	6.68	18.35	3.56	1.69	1.88	4.59	6.47	11.89
36	7.02	18.77	3.56	1.69	1.88	4.82	6.70	12.07
37	7.37	19.21	3.56	1.69	1.88	5.06	6,93	12.28
38	7.74	19.68	3.58	1.69	1.88	5.29	7.17	12.50
39	8.14	20.17	3.58	1.69	1.88	5.53	7.41	12.76
40	8.55	20.69	3.58	1.69	1.88	5.76	7,64	13,05
41	8.99	21.24	3.59	1.70	1.89	5,99	7.88	13.36
42	9.46	21.83	3.59	1.70	1.89	6.23	8.12	13.71
43	9.96	22.44	3.59	1.70	1.89	6.46	8.35	14.09
44	10.48	23.10	3.60	1.71	1.89	6.70	8.59	14.51
45	11.03	23.79	3.60	1.71	1.89	6.93	8.82	14.97

Table 2

ECREAL D	. 000	CDDCD	NONTOR	

		(1)	(2)	(3)	(4) (2) + (3)	(5)	(6) (4) + (5)	(7)
ISSUE AGE	NET LEVEL ANNUAL PREMIUM	MAXIMUM FIRST YEAR EXPENSE ALLOWANCE	FIRST YEAR EXPENSE CHARGE	AVERAGE RENEWAL EXPENSE CHARGE	INITIAL ACQUIS EXPENSE CHARGE	MAXIMUM SURRENDER CHARGE	TOTAL CHARGES	(1) - (6)  UNUSED  EXPENSE  ALLOWANCE
46	11.62	24.52	3,60	1.71	1.89	7,32	9.21	
47	12.24	25.30	3.61	1.71	1,90	7.70	9.61	15.31 15.69
48	12.89	26.12	3.61	1.71	1.90	8.09	9.99	16.12
49	13.58	26.98	3.62	1.72	1.91	8.48	10.39	16,59
50	14.31	27.89	3.62	1.72	1.91	8,87	10.77	17.12
51	15,08	28.85	3.64	1.72	1.91	9.25	11.17	17.68
52	15.89	29.86	3.64	1.72	1.91	9.64	11.55	18,31
53	16.74	30,93	3.65	1.73	1.92	10.03	11.95	18.98
54	17.64	32.05	3.65	1.73	1.92	10.41	12.33	19.72
55	18.59	33.24	3.66	1.73	1.93	10.80	12.73	20.51
56	19.59	34.49	3,91	1.85	2.06	11,43	13.49	21.00
57	20.65	35.81	3.91	1.85	2.06	12.06	14.12	21.69
58	21.76	37.20	3.92	1.86	2.07	12.69	14.76	22.45
59	22.94	38.68	3.94	1.86	2.07	13.32	15.39	23.28
60 61	24.19	40.24	3.95	1.87	2.08	13.95	16.03	24.21
62	25.51	41.89	3.96	1.88	2.08	14.71	16.79	25.10
63	26.92 28.42	43.65	3.97	1.88	2.09	15.46	17.55	26.10
64	30.02	45.53 47.53	3.98	1.89	2.10	16.22	18.31	27.21
65	31.73	49.66	4.00	1.89	2.10	16.97	19.08	28.45
66	33.56	51.95	4.02 4.03	1.90	2.12	17.73	19.85	29.82
67	35.51	54.39	4.03	1.91	2.12	18.94	21.06	30.89
68	37.61	57.01	4.08	1.92 1.93	2.13	20.14	22.28	32.11
69	39.85	59.82	4.10	1.94	2,15	21.35	23,50	33,51
70	42.26	60.00	4.14	1.94	2.16	22.50	24.66	35,16
71	44.85	₹ 60.00	4.18	1.98	2.18	22.50	24.68	35.32
72	47.63	60.00	4.22	2.00	2.20 2.22	22.50 22.50	24.70	35.30
73	50.62	60.00	4.27	2.02	2.25	22.50	24.72	35.28
74	53.83	60.00	4.34	2.06	2.29	22.50	24.75 24.79	35.25
75	57.29	60.00	4.44	2.10	2.34	22.50	24.79	35.21
76	61.02	60.00	4.57	2.17	2.41	22.50	24.91	35.16
77	65.06	60.00	4.79	2.27	2.52	22.50	25.02	35,09 34,98
78	69.43	60.00	5.20	2.46	2.73	22.50	25.23	34.77
79	74.18	60.00	6.35	3.01	3.34	22,50	25.84	34.16
80	79.34	60.00	7.49	3.55	3.94	22,50	26.44	33,56
81	84.98	60.00	8.63	4.09	4.54	22,50	27.04	32.96
82	91.02	60.00	9.78	4.63	5.15	22.50	27.65	32.35
83	97.45	60.00	10.92	5.17	5.75	22.50	28.25	31.75
84	104.37	60.00	12.07	5.72	6.35	22.50	28.85	31.15
85	111.81	60.00	13.21	6.26	6.95	22.50	29.45	30.55

Table 2

F		N.	Δ	LE	J٨	NI.	ťΩ	D	٨	^	n	٠
6	<b>E</b>	ш	-	LE	 ٧U	w	1 L 2	н	м			3

	LIMALE NON	UDACCU						
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
		BAA VIANI IBA	FIDOT		(2) + (3)		(4) + (5)	(1) - (6)
	NET LEVEL	MAXIMUM	FIRST	AVERAGE	INITIAL			
ISSUE	ANNUAL	FIRST YEAR	YEAR	RENEWAL	ACQUIS	MAXIMUM		UNUSED
		EXPENSE	EXPENSE	EXPENSE	EXPENSE	SURRENDER	TOTAL	EXPENSE
AGE	PREMIUM	ALLOWANCE	CHARGE	CHARGE	CHARGE	CHARGE	CHARGES	ALLOWANCE
0								
1	1.36 1.40	11.70	3.67	1.74	1.93	1.80	3.73	7.96
2	1.46	11.75	3.67	1.74	1.93	1.93	3.86	7.89
3	1.52	11.82	3.67	1.74	1.93	2.04	3.98	7.85
4	1.52	11.90	3.67	1.74	1,93	2.17	4.10	7.80
5		11,99	3.67	1.74	1.93	2.29	4.22	7.77
6	1.66 1.74	12.08	3.67	1.74	1.93	2.41	4.34	7.73
7	1.82	12.17	3.67	1.74	1.93	2.53	4.46	7.71
8		12.28	3,67	1.74	1.93	2.66	4.59	7.69
9	1.90 1,99	12.38	3.67	1.74	1.93	2.77	4.70	7.68
10	2.09	12.49	3.67	1.74	1.93	2.90	4.83	7.66
11		12.61	3.67	1.74	1.93	3.02	4.95	7.66
12	2.19	12.73	3.67	1.74	1.93	3.14	5.07	7.66
13	2,29	12.86	3.67	1.74	1.93	3.26	5.19	7.67
14	2.40	12.99	3.67	1.74	1.93	3.38	5.32	7.68
15	2.51	13.13	3.67	1.74	1.93	3.50	5.43	7.70
16	2.62	13,28	3.67	1.74	1.93	3.63	5.56	7.72
17	2.74	13,43	3.67	1.74	1.93	3.74	5.68	7.75
18	2.87	13.59	3.67	1.74	1.93	3.87	5.80	7.78
19	3.00	13.75	3,67	1.74	1.93	3.99	5.92	7.83
20	3.14	13.92	3.67	1.74	1.93	4.11	6.05	7.88
20 21	3.28	14.10	3.54	1.68	1.86	3.02	4.88	9.23
22	3.44	14.30	3.54	1.68	1.86	3.19	5.05	9.25
23	3.60	14.50	3.55	1.68	1.87	3.36	5.23	9.27
23 24	3.77	14.71	3.55	1.68	1.87	3.53	5.40	9.31
25	3.95	14.93	3.55	1.68	1.87	3.70	5.57	9.36
26	4.14	15.17	3.55	1.68	1.87	3.87	5.74	9.43
27	4.33	15.42	3.55	1.68	1.87	4.02	5.89	9.53
28	4.54	15.68	3.56	1.69	1.88	4.18	6.05	9.63
29	4.76	15.96	3.56	1.69	1.88	4.33	6.20	9.75
30	5.00	16.25	3.56	1.69	1.88	4.48	6.36	9,89
31	5.24 5.50	16,55	3.56	1.69	1,88	4.64	6.51	10.04
32	5.77	16.88	3.56	1.69	1.88	4.79	6.66	10.21
33	5.77 6.06	17.22	3.58	1.69	1.88	4.94	6.82	10.39
34	6.36	17.58	3.58	1.69	1.88	5.09	6.98	10.60
35	6.68	17.95	3.58	1.69	1.88	5.25	7.13	10.82
36	7.02	18.35	3.59	1.70	1.89	5.40	7.29	11.06
37	7.37	18.77	3,59	1.70	1.89	5,69	7.58	11.19
38	7.74	19,21	3,59	1.70	1.89	5,98	7.86	11.35
39	8.14	19.68	3,59	1.70	1.89	6.26	8.15	11.52
40 40	8.55	20.17	3.60	1.71	1.89	6.55	8.45	11.72
41	8.99	20.69	3,60	1.71	1.89	6.84	8.73	11.96
42	9.46	21.24	3.60	1.71	1.89	7.13	9.02	12.22
43	9.96	21.83	3.61	1.71	1.90	7.42	9.32	12.51
44	10.48	22.44	3.61	1.71	1.90	7,70	9.61	12.84
45	11.03	23.10	3.61	1.71	1.90	7.99	9.89	13,21
	11.00	23.79	3.62	1.72	1.91	8.28	10.19	13.60

Table 2

	FEMALE NON	TOBACCO						1 .
		(1)	(2)	(3)	(4) (2) + (3)	(5)	(6) (4) + (5)	(7) (1) - (6)
ISSUE AGE	NET LEVEL ANNUAL PREMIUM	MAXIMUM FIRST YEAR EXPENSE ALLOWANCE	FIRST YEAR EXPENSE CHARGE	AVERAGE RENEWAL EXPENSE CHARGE	INITIAL ACQUIS EXPENSE CHARGE	MAXIMUM SURRENDER CHARGE	TOTAL CHARGES	UNUSED EXPENSE ALLOWANCE
46	11.62	24.52	3.62	1.72	1.91	8.76	10.66	
47	12.24	25.30	3,64	1.72	1:91	9.23	11.15	13.86
48	12.89	26.12	3.64	1.72	1,91	9.71	11.62	14.15
49	13.58	26.98	3,65	1.73	1,92	10.19	12.11	14.49
50	14.31	27.89	3.65	1.73	1.92	10.67	12.59	14.87
51	15.08	28.85	3.66	1.73	1.93	11.14	13.07	15.30
52	15.89	29.86	3.66	1.73	1.93	11.62	13.55	15.78 16.32
53	16.74	30.93	3.67	1.74	1,93	12,10	14.03	16.90
54	17.64	32.05	3.67	1.74	1,93	12.57	14.51	17.55
55	18.59	33.24	3.68	1.75	1.94	13.05	14.99	18.25
56	19.59	34.49	3.94	1.86	2.07	13.83	15.90	18.59
57	20.65	35,81	3,94	1.86	2.07	14.63	16.70	19.11
58	21.76	37.20	3.95	1.87	2.08	15.41	17.49	19.72
59	22.94	38.68	3.96	1.88	2.08	16.20	18,28	20.39
60	24.19	40.24	3.97	1.88	2.09	16.98	19.07	21.16
61	25.51	41.89	3.98	1,89	2.10	17.84	19.93	21.96
62	26.92	43.65	4.00	1.89	2.10	18.68	20.79	22.87
63 64	28.42	45.53	4.01	1.90	2.11	19.54	21.65	23.88
65	30.02	47.53	4.03	1.91	2.12	20.39	22.51	25.02
66	31.73	49,66	4.04	1.92	2.13	21.24	23.37	26.30
67	33.56	51.95	4.07	1.93	2.14	22,50	24.64	27.31
68	35.51	54.39	4.08	1.93	2.15	22.50	24.65	29.74
69	37.61	57.01	4.10	1.94	2.16	22.50	24.66	32.35
70	39.85	59.82	4.14	1.96	2.18	22.50	24.68	35.14
70 71	42.26	60.00	4.16	1.97	2.19	22.50	24.69	35.31
72	44.85	<b>\ 60.00</b>	4.21	2.00	2.22	22.50	24.72	35.28
73	47.63 50.62	60.00	4.26	2.02	2.24	22.50	24.74	35.26
74		60.00	4.31	2.04	2.27	22.50	24.77	35.23
75	53,83 57,29	60.00	4.38	2.07	2.31	22.50	24.81	35.19
76	57.29 61.02	60.00	4.49	2.13	2,36	22.50	24.86	35,14
77	65.06	60.00 60.00	4.62	2.19	2.43	22.50	24.93	35,07
78	69.43		4.85	2.30	2.55	22.50	25.05	34.95
79	74.18	60.00 60.00	5.27	2.50	2.77	22.50	25.27	34.73
80	79,34	60.00	6.46	3.06	3.40	22.50	25.90	34,10
81	84.98	60.00	7.64	3,62	4.02	22.50	26.52	33.48
82	91.02	60.00	8.83 10.02	4.18	4.65	22.50	27.15	32,85
83	97.45	60.00	11.20	4.75	5.27	22.50	27.77	32.23
84	104.37	60.00	12.38	5.30	5.89	22.50	28.39	31.61
85	111.81	60.00	13.57	5.87	6.52	22.50	29.02	30.98
		50.00	13.31	6.43	7.14	22.50	29.64	30.36

Table 2

FEMALE	PREFE	DDEN 1	ORACCO

NET LEVEL   REST YEAR   FERST			(1)	(2)	(3)	(4) (2) + (3)	(5)	(6) (4) + (5)	(7)
AGE PREMIUM  AGE PREMIUM  1.78  1.10  1.176  1.176  1.176  1.176  1.176  1.176  1.176  1.176  1.176  1.176  1.176  1.176  1.177  1.171  1.181  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.183  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184  1.184			FIRST YEAR	YEAR		INITIAL	MAXIMUM	(4) T (3)	(1) - (6) UNUSED
1 1.42 12.28 3.57 1.74 1.33 1.30 3.75 3.66 8.42 2 1.90 12.38 3.57 1.74 1.33 2.04 3.98 8.40 3.20 3.98 1.24 4.24 3.57 1.74 1.33 2.04 3.98 8.40 3.20 4.22 6.38 4.22 6.38 4.20 1.25 1.26 1.37 1.74 1.38 2.21 4.10 8.38 4.20 4.22 6.38 4.22 6.38 6.22 1.22 1.26 3.57 1.74 1.38 2.24 4.24 4.34 8.3.8 6 2.29 1.26 3.57 1.74 1.38 2.24 4.34 4.34 8.3.8 6 2.29 1.26 3.57 1.74 1.38 2.25 4.49 4.24 8.3.8 6 2.29 1.26 3.57 1.74 1.38 2.25 4.49 4.20 8.40 7.2 4.0 13.00 3.57 1.74 1.38 2.25 4.49 4.20 8.40 1.20 1.20 1.20 1.20 1.20 1.20 1.20 1.2							SURRENDER		EXPENSE
1 1.8.2 12.28 3.87 1.74 1.83 1.33 3.86 8.42 2.9 1.90 12.38 3.57 1.74 1.93 2.04 3.99 8.40 8.40 1.99 12.48 3.57 1.74 1.93 2.17 4.10 8.3.8 6.6 2.29 12.86 3.57 1.74 1.93 2.21 4.40 8.3.8 6.6 2.29 12.86 3.57 1.74 1.93 2.25 4.42 4.34 8.3.8 6.2.51 1.3.14 3.57 1.74 1.93 2.58 4.49 8.40 8.40 8.40 1.30 3.57 1.74 1.93 2.58 4.49 8.40 8.40 1.30 3.57 1.74 1.93 2.58 4.49 8.40 1.30 3.57 1.74 1.93 2.58 4.49 8.40 1.30 3.57 1.74 1.93 2.58 4.49 8.40 1.30 1.30 1.30 1.30 1.30 1.30 1.74 1.33 2.77 4.70 8.43 8.40 1.30 1.30 1.30 1.30 1.30 1.30 1.30 1.3	. 0	1.76	12.20	3.67	1 74	4.02	4.00		
2 19.0 12.38 3.67 1.74 1.33 2.04 3.96 8.40 3 1.99 12.48 3.57 1.74 1.33 2.04 3.96 8.40 4 2.05 12.60 3.67 1.74 1.33 2.27 4.22 8.3.8 6 2.18 12.73 3.57 1.74 1.33 2.26 4.22 8.3.8 6 2.29 12.86 3.57 1.74 1.33 2.26 4.22 8.3.8 6 2.29 12.86 3.57 1.74 1.33 2.41 4.34 8.3.8 6 2.29 12.86 3.57 1.74 1.33 2.41 4.34 8.3.8 7 2.40 13.00 3.57 1.74 1.33 2.55 4.49 8.40 9 2.64 13.29 3.57 1.74 1.33 2.55 4.59 8.41 10 2.76 13.48 3.57 1.74 1.33 2.56 4.59 8.41 11 2.90 13.51 3.57 1.74 1.33 3.00 4.53 8.45 11 2.90 13.51 3.57 1.74 1.33 3.00 4.53 8.45 11 2.90 13.53 3.57 1.74 1.33 3.00 4.53 8.51 12 3.04 13.00 3.57 1.74 1.33 3.36 5.57 13 3.19 13.99 3.67 1.74 1.33 3.36 5.59 13 3.19 3.39 3.67 1.74 1.33 3.36 5.59 14 3.35 14.15 3.57 1.74 1.33 3.36 5.59 15 3.51 1.43 3.57 1.74 1.33 3.36 5.50 15 3.51 1.44 3.35 1.47 1.38 3.36 5.90 16 3.88 14.53 3.67 1.74 1.93 3.3.6 5.90 17 3.88 14.53 3.67 1.74 1.93 3.3.6 5.90 18 3.51 1.49 3.57 1.74 1.93 3.3.6 5.90 18 3.51 1.49 3.57 1.74 1.93 3.3.6 5.90 18 3.51 1.49 3.57 1.74 1.93 3.3.6 5.90 19 4.25 1.31 1.49 3.57 1.74 1.93 3.3.6 5.55 8.8.3 16 3.89 14.50 3.57 1.74 1.93 3.50 5.55 8.8.3 17 3.88 14.50 3.57 1.74 1.93 3.57 5.50 18 4.05 1.50 3.51 1.49 3.57 1.74 1.93 3.57 5.50 19 4.25 1.51 1.50 1.50 1.50 1.50 1.50 1.50 1.5	1	1.82							
3         1.98         12.49         3.87         1.74         1.93         2.17         4.10         8.38           6         2.18         12.73         3.67         1.74         1.93         2.23         4.22         8.38           6         2.28         12.26         3.67         1.74         1.93         2.24         4.34         8.38           7         2.40         13.00         3.57         1.74         1.93         2.68         4.49         8.41           8         2.51         13.14         3.57         1.74         1.93         2.66         4.49         8.41           9         2.64         13.29         3.67         1.74         1.93         3.02         4.95         8.51           10         2.76         13.46         3.67         1.74         1.93         3.02         4.95         8.51           11         2.90         13.83         3.67         1.74         1.93         3.24         4.95         8.51           12         3.04         13.80         3.67         1.74         1.93         3.34         5.52         6.67           13         3.51         14.39         3.67 <t< td=""><td>2</td><td>1.90</td><td>12.38</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	2	1.90	12.38						
4 2.08 12.80 3.67 1.74 1.93 2.29 4.22 8.38 6 2.29 12.85 3.67 1.74 1.93 2.41 4.34 8.38 6 2.29 12.85 3.67 1.74 1.93 2.53 4.46 8.40 7.20 13.00 3.57 1.74 1.93 2.66 4.59 8.41 8.20 13.00 13.00 3.57 1.74 1.93 2.66 4.59 8.41 8.20 13.00 13.00 3.57 1.74 1.93 2.66 4.59 8.41 9.20 13.00 13.00 13.00 13.00 13.00 13.00 14.50 15.00 13.00 13.00 14.50 15.00 13.00 13.00 14.50 15.00 13.00 13.00 14.50 15.00 13.00 14.50 15.00 13.00 14.50 15.00 13.00 14.50 15.00 13.00 14.50 15.00 13.00 14.50 15.00 13.00 14.50 15.00 13.00 14.50 15.00 13.00 14.50 15.00 15.00 15.00 15.00 15.00 15.00 15.00 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 15.50 1	3	1.99	12.49						
6 2.29 12.65 3.67 1.74 1.93 2.41 4.54 6.38 6.38 7 2.40 13.00 3.57 1.74 1.93 2.58 4.46 8.40 8.41 8.20 13.00 3.57 1.74 1.93 2.58 4.46 8.40 8.41 8.20 13.00 3.57 1.74 1.93 2.58 4.49 8.41 8.40 9 2.54 13.29 3.67 1.74 1.93 2.59 4.83 8.46 10 2.76 13.46 3.87 1.74 1.93 2.90 4.83 8.46 10 2.76 13.46 3.87 1.74 1.93 3.02 4.95 8.51 11 2.90 13.83 3.67 1.74 1.93 3.02 4.95 8.51 11 2.90 13.83 3.67 1.74 1.93 3.02 4.95 8.51 11 2.90 13.83 3.67 1.74 1.93 3.02 4.95 8.51 11 2.90 13.83 3.67 1.74 1.93 3.04 13.50 3.57 1.74 1.93 3.25 5.19 8.61 13 3.19 13.99 3.67 1.74 1.93 3.35 5.19 8.61 13 3.35 14.18 3.57 1.74 1.93 3.35 5.19 8.61 13 3.51 14.18 3.57 1.74 1.93 3.35 5.50 5.43 8.75 15 3.51 14.18 3.57 1.74 1.93 3.69 5.43 8.76 5.68 8.93 1.77 3.86 14.83 3.67 1.74 1.93 3.67 3.74 5.88 14.69 3.57 1.74 1.93 3.67 5.68 8.93 1.77 3.86 14.83 3.67 1.74 1.93 3.67 5.58 8.93 1.77 3.86 14.83 3.67 1.74 1.93 3.87 6.50 9.02 18 4.00 15.06 3.57 1.74 1.93 3.87 6.50 9.02 18 4.00 15.06 3.57 1.74 1.93 3.87 6.50 9.02 18 4.00 15.06 3.57 1.74 1.93 3.87 6.50 9.02 18 4.00 15.06 3.57 1.74 1.93 3.57 6.50 9.02 19 19 4.25 15.31 3.57 1.74 1.93 3.57 6.50 9.02 19 19 4.25 15.31 3.57 1.74 1.93 3.55 5.55 10.02 19 19 4.25 15.31 3.57 1.74 1.90 3.55 5.55 10.02 19 19 4.25 15.31 3.57 1.74 1.90 3.55 5.55 10.02 19 19 4.25 15.31 3.57 1.74 1.90 3.55 5.55 10.02 19 19 19 4.25 15.31 3.57 1.74 1.90 3.55 5.55 10.02 19 19 19 19 19 19 19 19 19 19 19 19 19	4	2.08	12.60	3.67					
6	5	2.18	12.73	3.67					
7	6	2.29	12.86	3.67					
8 2.51 13.14 3.67 1.74 1.93 2.20 4.83 0.46 10 2.76 13.46 3.67 1.74 1.93 2.20 4.83 0.46 10 2.76 13.46 3.67 1.74 1.93 3.02 4.95 6.51 11 2.20 13.63 3.67 1.74 1.93 3.14 6.07 6.55 12 3.04 13.20 3.67 1.74 1.93 3.14 6.07 6.55 12 3.04 13.20 3.67 1.74 1.93 3.14 6.07 6.55 13 3.19 13.99 3.67 1.74 1.93 3.28 6.19 6.61 13 3.19 13.99 3.67 1.74 1.93 3.28 6.32 8.67 1.74 1.93 3.50 5.43 8.75 14 3.35 14.18 3.67 1.74 1.93 3.50 5.43 8.75 15 3.51 14.39 3.67 1.74 1.93 3.50 5.43 8.75 16 3.51 14.39 3.67 1.74 1.93 3.50 5.43 8.75 16 3.58 14.80 3.67 1.74 1.93 3.74 5.68 8.93 17 3.88 14.80 3.67 1.74 1.93 3.74 5.68 8.93 17 3.88 14.80 3.67 1.74 1.93 3.74 5.68 8.93 17 3.88 14.80 3.67 1.74 1.93 3.74 5.68 8.93 17 3.88 14.80 3.67 1.74 1.93 3.77 5.00 9.02 18 4.05 15.57 3.81 1.71 1.90 3.85 5.55 10.02 18 4.05 15.57 3.81 1.71 1.90 3.85 5.55 10.02 18 4.05 15.57 15.58 3.81 1.71 1.90 3.85 5.55 10.02 12 4.96 15.12 3.81 1.71 1.90 3.85 5.55 10.02 12 4.90 15.12 3.81 1.71 1.90 3.85 5.74 10.10 1.22 4.90 15.12 3.81 1.71 1.90 4.21 6.11 10.30 1.22 4.90 15.12 3.81 1.71 1.90 4.21 6.11 10.30 1.22 4.90 15.12 3.81 1.71 1.90 4.21 6.11 10.30 1.22 4.90 15.12 3.81 1.71 1.90 4.21 6.11 10.30 1.22 4.90 15.12 3.81 1.71 1.90 4.21 6.11 10.30 1.22 1.22 4.90 15.12 3.81 1.71 1.90 4.21 6.11 10.30 1.22 1.22 4.90 15.12 3.81 1.71 1.90 4.21 6.11 10.30 1.22 1.22 4.90 15.12 3.81 1.71 1.90 4.21 6.11 10.30 1.22 1.22 4.90 15.12 3.81 1.71 1.90 4.21 6.11 10.30 1.22 1.22 4.90 15.12 3.81 1.71 1.90 4.21 6.11 10.30 1.22 1.22 4.90 15.12 3.81 1.71 1.90 4.21 6.11 10.30 1.22 1.22 4.90 15.12 3.81 1.71 1.90 4.21 6.11 10.30 1.22 1.22 4.90 15.12 3.81 1.71 1.90 4.21 6.11 10.30 1.22 1.22 1.22 1.22 1.22 1.22 1.22 1.2	7	2.40	13.00	3.67					
9 2.84 13.29 3.67 1.74 1.93 2.90 4.83 8.48 1.14 1.29 1.20 1.36 3.46 3.67 1.74 1.93 3.02 4.95 8.51 1.14 2.90 13.83 3.67 1.74 1.93 3.02 4.95 8.51 1.14 2.90 13.83 3.67 1.74 1.93 3.26 5.19 8.51 1.2 3.04 13.80 3.67 1.74 1.93 3.26 5.19 8.51 1.3 3.19 13.99 3.67 1.74 1.93 3.26 5.19 8.51 1.3 3.19 13.99 3.67 1.74 1.93 3.36 5.52 8.67 1.4 3.35 14.18 3.67 1.74 1.93 3.50 5.43 8.75 1.5 1.4 3.9 3.67 1.74 1.93 3.50 5.43 8.75 1.5 1.4 3.9 3.67 1.74 1.93 3.50 5.43 8.75 1.5 1.4 3.9 3.67 1.74 1.93 3.57 5.56 8.83 1.7 3.86 1.83 3.67 1.74 1.93 3.74 5.58 8.93 1.7 3.86 1.83 3.67 1.74 1.93 3.77 5.50 9.02 1.8 4.00 15.06 3.67 1.74 1.93 3.77 5.50 9.02 1.8 4.00 15.06 3.67 1.74 1.93 3.77 5.50 9.02 1.8 4.00 15.06 3.67 1.74 1.93 3.77 5.50 9.02 1.8 4.00 15.06 3.67 1.74 1.93 3.57 5.50 9.02 1.14 1.9 4.25 1.5 1 3.57 1.74 1.93 3.55 5.55 1.0 2.2 2.1 4.67 1.5 4.4 3.51 1.71 1.90 3.55 5.55 1.0 2.2 2.1 4.67 1.5 4.4 3.51 1.71 1.90 3.55 5.55 1.0 2.2 2.2 4.90 1.5 1.5 4.3 3.51 1.71 1.90 3.55 5.55 1.0 2.2 2.2 4.90 1.5 1.5 3.5 1.5 1.7 1.9 4.00 6.3 1.0 2.2 4.9 1.5 1.5 1.5 1.5 1.5 1.5 1.7 1.9 1.9 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5		2.51	13,14	3.67					
10		2.64	13.29	3.67	1.74	1.93			
11		2.76	13.46	3.67	1.74				
12 3.04 13.80 3.67 1.74 1.93 3.26 5.19 8.61 3.61 1.74 1.93 3.26 5.19 8.61 1.74 1.93 3.36 5.32 8.67 1.74 1.93 3.35 5.32 8.67 1.74 1.93 3.35 5.32 8.67 1.74 1.93 3.35 5.32 8.67 1.74 1.93 3.35 5.32 8.67 1.74 1.93 3.50 6.43 8.75 1.74 1.93 3.50 6.43 8.75 1.74 1.93 3.50 6.43 8.75 1.74 1.93 3.50 6.43 8.75 1.74 1.93 3.50 6.43 8.75 1.74 1.93 3.67 5.50 9.02 1.74 1.93 3.67 5.80 9.02 1.74 1.93 3.74 5.88 8.93 1.75 1.74 1.93 3.74 5.88 8.93 1.75 1.74 1.93 3.74 5.88 8.93 1.75 1.74 1.93 3.99 5.92 9.14 1.94 1.94 1.95 1.95 1.95 1.95 1.95 1.95 1.95 1.95			13.63	3.67	1.74	1.93			
13			13,80	3.67	1.74	1.93			
14 3.35 14.18 3.67 1.74 1.93 3.59 5.43 8.75 1.5   15 3.51 14.39 3.67 1.74 1.93 3.63 5.56 8.83   16 3.58 14.60 3.67 1.74 1.93 3.74 5.58 8.93   17 3.56 14.83 3.67 1.74 1.93 3.74 5.58 8.93   17 3.56 14.83 3.67 1.74 1.93 3.74 5.58 8.93   18 4.05 15.06 3.57 1.74 1.93 3.99 5.92 9.14   19 4.25 15.31 3.67 1.74 1.93 3.99 5.92 9.14   19 4.25 15.31 3.67 1.74 1.93 3.99 5.92 9.14   20 4.46 15.57 3.61 1.71 1.90 3.85 5.55 10.02   21 4.87 15.84 3.61 1.71 1.90 3.85 5.55 10.02   22 4.90 16.12 3.61 1.71 1.90 4.02 5.92 10.20   23 513 16.42 3.61 1.71 1.90 4.02 5.92 10.20   24 5.38 16.73 3.62 1.72 1.91 4.40 6.31 10.30   24 5.38 16.73 3.62 1.72 1.91 4.40 6.31 10.42   25 5.55 17.06 3.62 1.72 1.91 4.40 6.31 10.46   26 5.92 17.40 3.62 1.72 1.91 4.83 6.74 10.66   27 6.21 17.77 3.62 1.72 1.91 5.08 6.98 10.76   28 6.52 18.15 3.84 1.72 1.91 5.08 6.98 10.76   29 6.84 18.55 3.64 1.72 1.91 5.52 7.23 10.92   29 6.84 18.55 3.64 1.72 1.91 5.50 7.86 11.47   32 7.92 1.990 3.55 1.73 1.92 6.53 8.45 11.08   33 8.32 2.040 3.55 1.73 1.92 6.53 8.45 11.08   34 8.74 2.0.92 3.55 1.73 1.92 6.53 8.45 11.47   35 9.16 2.148 3.55 1.73 1.92 6.53 8.45 11.47   36 9.85 2.206 3.66 1.73 1.92 6.78 8.70 12.23   36 9.85 2.206 3.66 1.73 1.93 7.43 9.35 12.21   36 11.20 2.401 3.87 1.74 1.93 8.64 1.0.67 1.28 1   37 10.14 2.267 3.65 1.73 1.93 7.43 9.35 12.71   38 10.66 23.32 3.66 1.73 1.93 7.43 9.35 12.71   38 10.66 23.32 3.66 1.73 1.93 7.43 9.35 12.71   38 10.66 23.32 3.66 1.73 1.93 7.43 9.35 12.71   39 11.20 2.401 3.87 1.74 1.93 8.64 10.67 13.43   40 11.79 2.473 3.67 1.74 1.93 8.64 11.79 1.94 9.45 11.39 14.43   41 12.40 2.550 3.88 1.75 1.94 9.45 11.39 1.41   42 13.06 2.520 3.58 1.75 1.94 9.45 11.39 1.41   42 13.06 2.520 3.58 1.75 1.94 9.45 11.39 14.43   43 13.76 2.719 3.88 1.75 1.94 9.45 11.39 1.41   44 14.49 2.8.11 3.70 1.75 1.95 10.67 1.26 11.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14.50 14				3.67	1.74	1.93	3.38		
15				3.67	1.74	1.93	3.50		
16				3.67	1.74	1.93	3.63	5.56	
17				3.67	1.74	1.93	3.74	5.68	
18					1.74	1.93	3.87	5.80	
19		· · · · · · · · · · · · · · · · · · ·			1.74	1.93	3.99	5.92	
21         4.67         15.84         3.61         1.71         1.90         3.85         5.55         10.02           22         4.90         16.12         3.61         1.71         1.90         4.02         5.92         10.20           23         5.13         16.42         3.61         1.71         1.90         4.02         5.92         10.20           24         5.38         16.73         3.62         1.72         1.91         4.40         6.31         10.42           25         5.65         17.06         3.62         1.72         1.91         4.40         6.31         10.42           26         5.92         17.40         3.62         1.72         1.91         4.83         6.74         10.66           27         6.21         17.77         3.62         1.72         1.91         5.08         6.98         10.78           28         6.52         18.15         3.64         1.72         1.91         5.08         6.98         10.78           29         6.84         18.55         3.64         1.72         1.91         5.81         7.72         11.26           30         7.18         18.99         3.64<						1.93	4.11	6.05	9.26
22         4.90         16.12         3.61         1.71         1.90         3.83         5.74         10.10           23         5.13         16.42         3.61         1.71         1.90         4.02         5.92         10.20           24         5.38         16.73         3.62         1.72         1.91         4.40         6.31         10.42           25         5.65         17.06         3.62         1.72         1.91         4.40         6.31         10.42           26         5.92         17.40         3.62         1.72         1.91         4.83         6.74         10.66           27         6.21         17.77         3.62         1.72         1.91         5.08         6.98         10.78           28         6.52         18.15         3.64         1.72         1.91         5.32         7.23         10.92           29         6.84         18.55         3.64         1.72         1.91         5.56         7.48         11.08           30         7.18         18.96         3.84         1.72         1.91         5.56         7.48         11.04           31         7.54         19.43         3.64<						1.90	3.65	5.55	10.02
23         5.13         16.42         3.61         1.71         1.90         4.02         5.92         10.20           24         5.38         16.73         3.62         1.72         1.91         4.40         6.31         10.42           25         5.65         17.06         3.62         1.72         1.91         4.59         6.50         10.56           26         5.92         17.00         3.62         1.72         1.91         4.83         6.74         10.66           27         6.21         17.77         3.62         1.72         1.91         5.08         6.98         10.78           28         6.52         18.15         3.64         1.72         1.91         5.52         7.23         10.92           29         6.84         18.55         3.64         1.72         1.91         5.56         7.48         11.08           30         7.18         19.43         3.64         1.72         1.91         5.51         7.72         11.26           31         7.54         19.43         3.65         1.73         1.92         6.29         8.21         11.69           32         7.92         19.90         3.65<						1.90	3.83	5.74	10.10
24         5.38         16.73         3.62         1.72         1.91         4.40         6.31         10.42           25         5.65         17.06         3.62         1.72         1.91         4.59         6.50         10.56           26         5.92         17.40         3.62         1.72         1.91         4.83         6.74         10.66           27         6.21         17.77         3.62         1.72         1.91         5.08         6.98         10.78           28         6.52         18.15         3.64         1.72         1.91         5.56         7.48         10.92           29         6.84         18.55         3.64         1.72         1.91         5.56         7.48         11.08           30         7.18         18.98         3.64         1.72         1.91         5.81         7.72         11.26           31         7.54         19.43         3.64         1.72         1.91         6.05         7.96         11.47           32         7.92         19.90         3.65         1.73         1.92         6.29         8.21         11.69           34         8.74         20.92         3.65<						1.90	4.02	5.92	10.20
25         5.65         17.06         3.62         1.72         1.91         4.59         6.50         10.56           26         5.92         17.40         3.62         1.72         1.91         4.83         6.74         10.66           27         6.21         17.77         3.62         1.72         1.91         5.08         6.98         10.78           28         6.52         18.15         3.64         1.72         1.91         5.32         7.23         10.92           29         6.84         18.55         3.64         1.72         1.91         5.56         7.48         11.08           30         7.18         18.58         3.64         1.72         1.91         5.56         7.48         11.08           31         7.54         19.43         3.64         1.72         1.91         6.05         7.96         11.47           32         7.92         19.90         3.65         1.73         1.92         6.29         8.21         11.69           33         8.32         20.40         3.65         1.73         1.92         6.53         8.45         11.94           43         8.74         20.92         3.65<						1.90	4.21	6.11	10.30
26         5.92         17.40         3.62         1.72         1.91         4.83         6.74         10.66           27         6.21         17.77         3.62         1.72         1.91         5.08         6.98         10.78           28         6.52         18.15         3.64         1.72         1.91         5.32         7.23         10.92           29         6.84         18.55         3.64         1.72         1.91         5.56         7.48         11.08           30         7.18         18.98         3.64         1.72         1.91         5.81         7.72         11.26           31         7.54         19.43         3.64         1.72         1.91         6.05         7.96         11.47           32         7.92         19.90         3.65         1.73         1.92         6.29         8.21         11.69           33         8.32         20.40         3.85         1.73         1.92         6.78         8.70         12.23           34         8.74         20.92         3.85         1.73         1.92         6.78         8.70         12.23           35         9.18         21.48         3.65<							4.40	6.31	10.42
27 6.21 17.77 3.62 1.72 1.91 5.08 6.98 10.78 28 6.52 18.15 3.64 1.72 1.91 5.08 6.98 10.78 29 6.84 18.55 3.64 1.72 1.91 5.56 7.48 11.08 30 7.18 18.98 3.64 1.72 1.91 5.81 7.72 11.26 31 7.54 19.43 3.64 1.72 1.91 6.05 7.96 11.47 32 7.92 19.90 3.65 1.73 1.92 6.29 8.21 11.69 33 8.32 20.40 3.65 1.73 1.92 6.53 8.45 11.94 34 8.74 20.92 3.65 1.73 1.92 6.53 8.45 11.94 35 9.18 21.48 3.65 1.73 1.92 6.78 8.70 12.23 36 9.55 22.06 3.66 1.73 1.92 7.02 8.94 12.54 36 9.65 22.06 3.66 1.73 1.93 7.43 9.35 12.71 37 10.14 22.67 3.66 1.73 1.93 7.43 9.35 12.71 38 10.66 23.32 3.66 1.73 1.93 7.83 9.76 12.92 39 11.20 24.01 3.67 1.74 1.93 8.64 10.16 13.16 40 11.79 24.73 3.67 1.74 1.93 8.64 10.57 13.43 41 12.40 25.50 3.68 1.75 1.94 9.45 11.39 14.53 43 13.75 27.19 3.68 1.75 1.94 9.86 11.79 14.63 44 14.49 28.11 3.70 1.75 1.94 9.86 11.79 14.63			•					6.50	10.56
28         6.52         18.15         3.64         1.72         1.91         5.32         7.23         10.92           29         6.84         18.55         3.64         1.72         1.91         5.56         7.48         11.08           30         7.18         18.98         3.64         1.72         1.91         5.81         7.72         11.26           31         7.54         19.43         3.64         1.72         1.91         6.05         7.96         11.47           32         7.92         19.90         3.65         1.73         1.92         6.29         8.21         11.69           33         8.32         20.40         3.65         1.73         1.92         6.53         8.45         11.94           34         8.74         20.92         3.65         1.73         1.92         6.78         8.70         12.23           35         9.18         21.48         3.65         1.73         1.92         7.02         8.94         12.54           36         9.55         22.06         3.66         1.73         1.93         7.43         9.35         12.71           37         10.14         22.67         3.66				*				6.74	10.66
29 6.84 18.55 3.64 1.72 1.91 5.32 7.23 10.92 30 7.18 18.98 3.64 1.72 1.91 5.81 7.72 11.08 31 7.54 19.43 3.64 1.72 1.91 6.05 7.96 11.47 32 7.92 19.90 3.65 1.73 1.92 6.29 8.21 11.69 33 8.32 20.40 3.65 1.73 1.92 6.29 8.21 11.69 34 8.74 20.92 3.65 1.73 1.92 6.78 8.70 12.23 35 9.18 21.48 3.65 1.73 1.92 6.78 8.70 12.23 36 9.65 22.06 3.66 1.73 1.92 7.02 8.94 12.54 36 9.65 22.06 3.66 1.73 1.93 7.43 9.35 12.71 37 10.14 22.67 3.66 1.73 1.93 7.43 9.35 12.71 38 10.66 23.32 3.66 1.73 1.93 7.83 9.76 12.92 39 11.20 24.01 3.67 1.74 1.93 8.24 10.16 13.16 40 11.79 24.73 3.67 1.74 1.93 8.64 10.57 13.43 40 11.79 24.73 3.67 1.74 1.93 9.05 10.98 13.75 41 12.40 25.50 3.68 1.75 1.94 9.45 11.39 14.11 42 13.06 26.32 3.68 1.75 1.94 9.45 11.39 14.11 42 13.06 26.32 3.68 1.75 1.94 9.45 11.39 14.11 43 13.75 27.19 3.68 1.75 1.94 9.86 11.79 14.63 44 14.49 28.11 3.70 1.75 1.94 9.86 11.79 14.63									10.78
30         7.18         18.98         3.64         1.72         1.91         5.81         7.72         11.08           31         7.54         19.43         3.64         1.72         1.91         6.05         7.96         11.26           32         7.92         19.90         3.65         1.73         1.92         6.29         8.21         11.69           33         8.32         20.40         3.65         1.73         1.92         6.53         8.45         11.94           34         8.74         20.92         3.65         1.73         1.92         6.78         8.70         12.23           35         9.18         21.48         3.65         1.73         1.92         7.02         8.94         12.54           36         9.65         22.06         3.66         1.73         1.93         7.43         9.35         12.71           37         10.14         22.67         3.66         1.73         1.93         7.83         9.76         12.92           39         11.20         24.01         3.67         1.74         1.93         8.64         10.57         13.43           40         11.79         24.73         3									10.92
31       7.54       19.43       3.64       1.72       1.91       6.05       7.96       11.47         32       7.92       19.90       3.65       1.73       1.92       6.29       8.21       11.69         33       8.32       20.40       3.65       1.73       1.92       6.53       8.45       11.94         34       8.74       20.92       3.65       1.73       1.92       6.78       8.70       12.23         35       9.18       21.48       3.65       1.73       1.92       7.02       8.94       12.54         36       9.65       22.06       3.66       1.73       1.93       7.43       9.35       12.71         37       10.14       22.67       3.66       1.73       1.93       7.83       9.76       12.92         38       10.66       23.32       3.66       1.73       1.93       7.83       9.76       12.92         39       11.20       24.01       3.67       1.74       1.93       8.54       10.16       13.16         40       11.79       24.73       3.67       1.74       1.93       9.05       10.98       13.75         41       1									11.08
32     7.92     19.90     3.55     1.73     1.92     6.29     8.21     11.69       33     8.32     20.40     3.65     1.73     1.92     6.53     8.45     11.94       34     8.74     20.92     3.65     1.73     1.92     6.78     8.70     12.23       35     9.18     21.48     3.65     1.73     1.92     7.02     8.94     12.23       36     9.65     22.06     3.66     1.73     1.93     7.43     9.35     12.71       37     10.14     22.67     3.66     1.73     1.93     7.83     9.76     12.92       38     10.66     23.32     3.66     1.73     1.93     8.24     10.16     13.16       39     11.20     24.01     3.67     1.74     1.93     8.64     10.57     13.43       40     11.79     24.73     3.67     1.74     1.93     9.05     10.98     13.75       41     12.40     25.50     3.68     1.75     1.94     9.45     11.39     14.11       42     13.06     26.32     3.68     1.75     1.94     9.86     11.79     14.63       43     13.75     27.19     3.68 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>11.26</td></td<>									11.26
33 8.32 20.40 3.65 1.73 1.92 6.53 8.21 11.69 34 8.74 20.92 3.65 1.73 1.92 6.78 8.70 12.23 35 9.18 21.48 3.65 1.73 1.92 7.02 8.94 12.54 36 9.65 22.06 3.66 1.73 1.93 7.43 9.35 12.71 37 10.14 22.67 3.66 1.73 1.93 7.83 9.76 12.92 38 10.66 23.32 3.66 1.73 1.93 7.83 9.76 12.92 39 11.20 24.01 3.67 1.74 1.93 8.64 10.57 13.43 40 11.79 24.73 3.67 1.74 1.93 8.64 10.57 13.43 40 11.79 24.73 3.67 1.74 1.93 9.05 10.98 13.75 41 12.40 25.50 3.68 1.75 1.94 9.45 11.39 14.11 42 13.06 26.32 3.68 1.75 1.94 9.45 11.39 14.11 43 13.75 27.19 3.68 1.75 1.94 9.86 11.79 14.63 44 14.49 28.11 3.70 1.75 1.96 10.67 12.61 15.50									
34     8.74     20.92     3.65     1.73     1.92     6.78     8.70     12.23       35     9.18     21.48     3.65     1.73     1.92     7.02     8.94     12.23       36     9.65     22.06     3.66     1.73     1.93     7.43     9.35     12.71       37     10.14     22.67     3.66     1.73     1.93     7.83     9.76     12.92       38     10.66     23.32     3.66     1.73     1.93     8.24     10.16     13.16       39     11.20     24.01     3.67     1.74     1.93     8.64     10.57     13.43       40     11.79     24.73     3.67     1.74     1.93     9.05     10.98     13.75       41     12.40     25.50     3.68     1.75     1.94     9.45     11.39     14.11       42     13.06     26.32     3.68     1.75     1.94     9.86     11.79     14.63       43     13.75     27.19     3.68     1.75     1.94     10.26     12.20     14.99       44     14.49     28.11     3.70     1.75     1.96     10.67     12.61     15.50	33								
35 9.18 21.48 3.65 1.73 1.92 7.02 8.94 12.54 36 9.65 22.06 3.66 1.73 1.93 7.43 9.35 12.71 37 10.14 22.67 3.66 1.73 1.93 7.83 9.76 12.92 38 10.66 23.32 3.66 1.73 1.93 8.24 10.16 13.16 39 11.20 24.01 3.67 1.74 1.93 8.64 10.57 13.43 40 11.79 24.73 3.67 1.74 1.93 9.05 10.98 13.75 41 12.40 25.50 3.68 1.75 1.94 9.45 11.39 14.11 42 13.06 26.32 3.68 1.75 1.94 9.86 11.79 14.63 43 13.75 27.19 3.68 1.75 1.94 9.86 11.79 14.63 44 14.49 28.11 3.70 1.75 1.94 10.26 12.20 14.99 45 15.26 29.08 3.70 1.75 1.96 10.67 12.61 15.50	34								•
36         9.65         22.06         3.66         1.73         1.93         7.43         9.35         12.71           37         10.14         22.67         3.66         1.73         1.93         7.83         9.76         12.71           38         10.66         23.32         3.66         1.73         1.93         8.24         10.16         13.16           39         11.20         24.01         3.67         1.74         1.93         8.64         10.57         13.43           40         11.79         24.73         3.57         1.74         1.93         9.05         10.98         13.75           41         12.40         25.50         3.68         1.75         1.94         9.45         11.39         14.11           42         13.06         26.32         3.68         1.75         1.94         9.86         11.79         14.63           43         13.75         27.19         3.68         1.75         1.94         10.26         12.20         14.99           44         14.49         28.11         3.70         1.75         1.95         10.67         12.61         15.50	35								
37         10.14         22.67         3.66         1.73         1.93         7.83         9.76         12.92           38         10.66         23.32         3.66         1.73         1.93         8.24         10.16         13.16           39         11.20         24.01         3.67         1.74         1.93         8.64         10.57         13.43           40         11.79         24.73         3.57         1.74         1.93         9.05         10.98         13.75           41         12.40         25.50         3.68         1.75         1.94         9.45         11.39         14.11           42         13.06         26.32         3.68         1.75         1.94         9.86         11.79         14.63           43         13.75         27.19         3.68         1.75         1.94         10.26         12.20         14.99           44         14.49         28.11         3.70         1.75         1.95         10.67         12.61         15.50	36	9.65							
38     10.66     23.32     3.66     1.73     1.93     8.24     10.16     13.16       39     11.20     24.01     3.67     1.74     1.93     8.64     10.57     13.43       40     11.79     24.73     3.67     1.74     1.93     9.05     10.98     13.75       41     12.40     25.50     3.58     1.75     1.94     9.45     11.39     14.11       42     13.06     26.32     3.68     1.75     1.94     9.86     11.79     14.63       43     13.75     27.19     3.68     1.75     1.94     10.26     12.20     14.99       44     14.49     28.11     3.70     1.75     1.95     10.67     12.61     15.50       45     15.26     29.08     3.70     1.75     1.95     10.67     12.61     15.50	37	10.14							
39	38	10.66		-					
40     11.79     24.73     3.57     1.74     1.93     9.05     10.98     13.75       41     12.40     25.50     3.58     1.75     1.94     9.45     11.39     14.11       42     13.06     26.32     3.68     1.75     1.94     9.86     11.79     14.63       43     13.75     27.19     3.68     1.75     1.94     10.26     12.20     14.99       44     14.49     28.11     3.70     1.75     1.95     10.67     12.61     15.50       45     15.26     29.08     3.70     1.75     1.95     10.67     12.61     15.50	39	11.20							
41     12.40     25.50     3.68     1.75     1.94     9.45     11.39     14.11       42     13.06     26.32     3.68     1.75     1.94     9.86     11.79     14.63       43     13.75     27.19     3.68     1.75     1.94     10.26     12.20     14.99       44     14.49     28.11     3.70     1.75     1.95     10.67     12.61     15.50       45     15.26     29.08     3.70     1.75     1.95     10.67     12.61     15.50	40	11.79	24.73						
42     13.06     26.32     3.68     1.75     1.94     9.86     11.79     14.63       43     13.75     27.19     3.68     1.75     1.94     10.26     12.20     14.99       44     14.49     28.11     3.70     1.75     1.95     10.67     12.61     15.50       45     15.26     29.08     3.70     1.75     1.95     10.67     12.61     15.50		12.40	25.50						
43 13.75 27.19 3.68 1.75 1.94 10.26 12.20 14.99 44 14.49 28.11 3.70 1.75 1.95 10.67 12.61 15.50		13.06	26.32						
44 14.49 28.11 3.70 1.75 1.95 10.67 12.61 15.50		13.75	27.19	3.68					
45 15.26 29.08 2.70 4.75		14.49	28.11	3.70			•		
	45	15.26	29.08	3.70	1,75				

Table 2

PREFERRED	

		ENTED TOBAGGG						
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
		MAXIMUM	FIRST	A) (ED 4 OF	(2) + (3)		(4) + (5)	(1) - (6)
	NET LEVEL	FIRST YEAR		AVERAGE	INITIAL			
ISSUE	ANNUAL	EXPENSE	YEAR	RENEWAL	ACQUIS	MAXIMUM		UNUSED
AGE	PREMIUM		EXPENSE	EXPENSE	EXPENSE	SURRENDER	TOTAL	EXPENSE
AOL	FREMIUM	ALLOWANCE	CHARGE	CHARGE	CHARGE	CHARGE	CHARGES	ALLOWANCE
46	16.09	30.11	3.71	1.76	1.95	11,72		
47	16.96	31.20	3.71	1.76	1.95		13.67	16.44
48	17.88	32.35	3.72	1.76	1.96	12.37	14.32	16.88
49	18.85	33.56	3.72	1.76	1.96	13.01	14.97	17.38
50	19.86	34.83	3.73	1.77	1,96	13.66	15.62	17.94
51	20.93	36.16	3.73	1.77	1.96	14.31	16.27	18.56
52	22.05	37.56	3.74	1.77	1.97	14.96	16.92	19.24
53	23.22	39.03	3.76	1.78		15.61	17.58	19.98
54	24.45	40.56	3.76	1.78	1.98	16.25	18.23	20.80
55	25.74	42.18	3.77	1.78	1.98	16.90	18.88	21.69
56	27.09	43.87	4.02	1.90	1.98	17.55	19.53	22.64
57	28.51	45,64	4.03	1.91	2.12	18.36	20.48	23,39
58	30.00	47.50	4.04	1.92	2.12	19.17	21.29	24.35
59	31.58	49,47	4.04	1.92	2.13	19.98	22.11	25.39
60	33.23	51,54	4.06	1.92	2.13	20.79	22.92	26.55
61	34.98	53.73	4.08	1,93	2.13	21.60	23.73	27.81
62	36.84	56.05	4.09	1.94	2.15	22.50	24.65	29.08
63	38.80	58,50	4.10	1.94	2.15	22.50	24.65	31.40
64	40.89	60.00	4.13	1.96	2.16	22.50	24.66	33.84
65	43.11	60.00	4.14		2.17	22.50	24.67	35,33
- 66	45.47	60.00	4.16	1.96	2.18	22.50	24.68	35.32
67	48.00	60.00	4.19	1.97 1.98	2.19	22,50	24.69	35.31
68	50,69	60.00	4.21	2.00	2.20	22.50	24.70	35,30
69	53,57	60.00	4.25		2.22	22.50	24.72	35.28
70	56.64	60.00	4.28	2.01 2.03	2.24	22.50	24.74	35.26
71	59.92	60.00	4.33		2.25	22.50	24.75	35.25
72	63.40	60.00	4.38	2.05	2.28	22,50	24.78	35.22
73	67.11	60,00	4.44	2.07	2.31	22.50	24.81	35.19
74	71.05	60.00	4.52	2.10	2.34	22,50	24.84	35.16
75	75.24	60.00	4.63	2.14	2.38	22.50	24.88	35.12
76	79.72	60.00	4.80	2.19	2.44	22.50	24.94	35.06
77	84.52	60.00	5.04	2.27	2.53	22.50	25.03	34.97
78	89.67	60.00	5.52	2.39	2.65	22.50	25.15	34.85
79	95.22	60.00	6.85	2.61	2.91	22.50	25.41	34.59
80	101.20	60.00		3.25	3.61	22.50	26.11	33.89
81	107.68	60.00	8.18	3.88	4.31	22.50	26.81	33.19
82	114.43	60.00	9.52 10.85	4.51	5.01	22.50	27.51	32.49
83	121,40	60.00	10.85	5.14	5.71	22,50	28.21	31.79
84	128.67	60.00	13.51	5.77	6.41	22.50	28.91	31.09
85	136.21	60.00		6.40	7.11	22.50	29.61	30.39
	100.421		14.84	7.03	7.81	22.50	30,31	29.69

Table 2

				٦				

NET LEVEL   REST YEAR   SEPENSE   EXPENSE   EXPENSE   CHARGE   C			(1)	(2)	(3)	(4) (2) + (3)	(5)	(6)	(7)
NET LEVEL   FIRST YEAR   YEARS   EXPENSE   EXPENSE   EXPENSE   EXPENSE   EXPENSE   EXPENSE   EXPENSE   EXPENSE   EXPENSE   CHARGE   CHAR			MAXIMUM	FIRST	AVERAGE			(4) + (5)	(1) - (6)
AGE PREMIUM ALLOWANCE CHARGE C		NET LEVEL					AAA YIRAI IAA		UNITOED
AGE PREMIUM ALLOWANCE CHARGE CHARGE CHARGE CHARGES CHA	ISSUE	ANNUAL						TOTAL	
1.76	AGE	PREMIUM	ALLOWANCE						
1 1.82 12.28 3.67 1.74 1.93 1.93 3.86 0.42 1.93 3.87 1.74 1.93 2.04 3.99 8.00 3.93 3.86 0.42 1.93 1.93 3.86 0.42 1.93 1.93 3.86 0.42 1.93 1.93 1.93 1.93 3.86 0.42 1.93 1.93 1.93 1.93 1.93 1.93 3.86 0.42 1.93 1.93 1.93 1.93 1.93 1.93 1.93 1.93				.=	010000	OHAROL	CHARGE	CHARGES	ALLOWANCE
1 1.8.2 12.28 3.67 1.7.4 1.93 1.33 3.56 3.42 2.9 1.90 12.38 3.67 1.7.4 1.93 2.04 3.99 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8	0	1.76	12.20	3.67	1.74	1 93	1 20	2 72	
2	1 1	1.82	12.28						
3         1.98         12.49         3.57         1.74         1.93         2.17         4.40         8.38           5         2.18         12.23         3.57         1.74         1.93         2.29         4.22         8.38           6         2.28         12.26         3.57         1.74         1.93         2.251         4.42         8.38           6         2.29         12.26         3.57         1.74         1.93         2.26         4.49         8.41           8         2.51         13.14         3.57         1.74         1.93         2.27         4.70         8.44           9         2.64         13.29         3.57         1.74         1.93         2.27         4.70         8.44           10         2.76         13.46         3.57         1.74         1.93         3.02         4.95         8.51           11         2.90         13.53         3.87         1.74         1.93         3.14         5.07         3.55         3.51           12         3.04         13.80         3.57         1.74         1.93         3.34         5.52         5.67           14         3.35         14.18         <	2	1.90	12.38	3.67					
4 2.88 12.60 3.57 1.74 1.93 2.29 4.22 8.38 6.50 6 2.28 12.63 3.57 1.74 1.93 2.41 4.34 8.3.8 6.6 2.29 12.86 3.57 1.74 1.93 2.53 4.46 8.40 7.7 2.40 13.00 3.67 1.74 1.93 2.56 4.59 8.41 8.50 8.40 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.84 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85 1.50 9.85	3	1.99	12.49	3.67					
5         2.18         12.73         3.57         1.74         1.93         2.24         4.34         8.38           6         2.29         12.66         3.67         1.74         1.93         2.53         4.46         8.40           7         2.00         13.00         3.67         1.74         1.93         2.26         4.49         8.41           8         2.51         13.14         3.67         1.74         1.93         2.27         4.70         8.44           9         2.64         13.29         3.67         1.74         1.93         3.02         4.95         8.41           10         2.76         13.46         3.87         1.74         1.93         3.02         4.95         8.51           11         2.90         13.58         3.87         1.74         1.93         3.14         5.07         3.55           12         3.04         13.80         3.87         1.74         1.93         3.26         5.19         6.81           13         3.14         3.57         1.74         1.93         3.53         5.50         6.81           14         3.35         14.18         3.67         1.74 <t< td=""><td>4</td><td>2.08</td><td>12.60</td><td>3.67</td><td></td><td></td><td></td><td></td><td></td></t<>	4	2.08	12.60	3.67					
6	5	2.18	12.73	3.67	1.74				
7		2.29	12.86	3.67	1.74				
8		2.40	13.00	3.67	1.74				
\$ 2.64		2.51	. 13.14	3.67	1.74				
10		2.64	13.29	3.67	1.74	1.93			
11			13.46	3.67	1.74	1.93			
12 3.04 13.80 3.67 1.74 1.93 3.28 5.19 8.51 13 3.19 13.99 3.67 1.74 1.93 3.38 5.32 8.67 14 3.35 14.18 3.67 1.74 1.93 3.36 5.32 8.67 15 3.51 14.39 3.67 1.74 1.93 3.50 5.43 8.75 15 3.51 14.39 3.67 1.74 1.93 3.55 5.56 8.83 16 3.58 14.60 3.67 1.74 1.93 3.57 5.56 8.83 17 3.86 14.83 3.67 1.74 1.93 3.67 5.80 9.02 18 4.05 15.06 3.67 1.74 1.93 3.99 5.92 9.14 19 4.25 15.31 3.67 1.74 1.93 3.99 5.92 9.14 19 4.25 15.31 3.67 1.74 1.93 3.99 5.92 9.14 19 4.25 15.31 3.67 1.74 1.93 4.23 6.16 9.41 19 4.25 15.31 3.67 1.74 1.93 4.23 6.16 9.41 19 4.25 15.31 3.67 1.74 1.93 4.23 6.16 9.41 19 4.25 15.31 3.67 1.74 1.93 4.23 6.16 9.41 19 4.25 15.31 3.67 1.74 1.93 4.23 6.16 9.41 19 4.25 15.31 3.67 1.74 1.93 4.23 6.16 9.41 19 4.25 15.31 3.67 1.74 1.93 4.23 6.16 9.41 19 4.25 15.31 3.67 1.74 1.93 4.23 6.16 9.41 19 4.26 15.57 3.67 1.74 1.93 4.23 6.16 9.41 19 4.25 15.31 3.67 1.74 1.93 4.23 6.16 9.41 19 4.25 15.31 3.67 1.74 1.93 4.23 6.16 9.41 19 4.25 15.31 3.67 1.74 1.93 4.23 6.16 9.41 19 4.25 15.31 3.67 1.74 1.93 4.23 6.16 9.41 19 4.25 15.31 3.67 1.74 1.93 4.23 6.16 9.41 10 4.87 15.84 3.87 1.74 1.93 4.23 6.16 9.41 10 4.87 15.84 3.87 1.74 1.93 4.23 6.16 9.41 10 4.87 15.84 3.87 1.74 1.93 4.23 6.16 9.41 10 4.87 15.84 3.87 1.74 1.93 4.23 6.16 9.41 10 4.87 15.84 3.87 1.75 1.94 4.82 6.76 9.55 10 5.55 1.70 3.68 1.75 1.94 6.22 7.16 9.90 10 5.25 7.16 9.90 10 5.25 1.70 3.70 1.75 1.95 5.51 7.45 9.95 10 5.85 1.70 3.70 1.75 1.95 6.08 8.02 1.01 10 5.25 1.81 1.81 3.70 1.75 1.95 6.54 8.59 1.03 10 7.18 18.88 3.71 1.76 1.95 6.54 8.59 1.03 11 7.54 1.94 3.37 1.76 1.95 6.54 8.59 1.03 12 9 6.84 1.85 3.71 1.76 1.95 6.54 8.59 1.03 13 7.54 1.94 3.37 1.77 1.96 8.51 1.04 1.14 13 9 9.15 2.14 3.77 1.76 1.96 8.51 1.04 1.14 14 1.240 2.5.0 3.76 3.76 1.78 1.99 1.08 11.27 1.34 14 1.12 2.40 2.5.0 3.76 1.77 1.97 9.89 11.86 1.27 14 1.14 1.12 2.40 2.5.0 3.76 1.77 1.97 9.89 11.86 1.27 14 1.14 1.14 1.15 1.14 14 1.14 1.14 1.14 1.15 1.14 1.15 1.15 1.			13.63	3.67	1.74	1.93			
13         3.19         13.99         3.67         1.74         1.93         3.38         5.32         8.67           14         3.35         14.18         3.67         1.74         1.93         3.50         5.43         8.75           15         3.51         14.39         3.67         1.74         1.93         3.53         5.56         8.83           16         3.68         14.60         3.67         1.74         1.93         3.74         5.68         8.93           17         3.86         14.83         3.67         1.74         1.93         3.74         5.68         8.93           18         4.05         15.06         3.67         1.74         1.93         3.99         5.92         9.14           19         4.25         15.31         3.67         1.74         1.93         4.23         6.16         9.41           20         4.46         15.57         3.67         1.74         1.93         4.23         6.16         9.41           21         4.87         15.84         3.67         1.74         1.93         4.43         6.36         9.48           22         4.90         16.12         3.68		3.04	13.80	3.67	1.74	1.93	3.26		
14         3.35         14.18         3.67         1.74         1.93         3.50         543         8.75           15         3.51         14.39         3.67         1.74         1.93         3.63         5.56         8.83           16         3.58         14.80         3.57         1.74         1.93         3.74         5.68         8.93           17         3.56         14.83         3.67         1.74         1.93         3.99         5.92         9.14           18         4.05         15.06         3.57         1.74         1.93         3.99         5.92         9.14           19         4.25         15.31         3.67         1.74         1.93         4.11         6.05         9.26           20         4.46         15.57         3.57         1.74         1.93         4.23         6.16         9.41           21         4.87         15.54         3.57         1.74         1.93         4.23         6.16         9.41           22         4.90         16.12         3.58         1.75         1.94         4.83         6.56         9.55           23         5.13         16.22         3.68			13.99	3.67	1.74	1.93	3.38		
15         3.51         14.39         3.67         1.74         1.93         3.83         5.56         8.83           16         3.58         14.60         3.67         1.74         1.93         3.74         5.58         8.93           17         3.86         14.83         3.67         1.74         1.93         3.87         5.80         9.02           18         4.05         15.06         3.67         1.74         1.93         3.99         5.92         9.14           19         4.25         15.31         3.67         1.74         1.93         4.11         6.05         9.26           20         4.46         15.57         3.67         1.74         1.93         4.23         6.16         9.41           21         4.67         15.84         3.67         1.74         1.93         4.23         6.16         9.48           22         4.90         16.12         3.68         1.75         1.94         4.83         6.56         9.56           24         5.38         16.73         3.68         1.75         1.94         4.82         6.76         9.65           24         5.38         16.73         3.68				3.67	1.74	1.93	3.50		
16         3.86         14.60         3.67         1.74         1.93         3.74         5.88         8.93           17         3.86         14.83         3.67         1.74         1.93         3.87         5.80         9.02           18         4.05         15.06         3.67         1.74         1.93         3.99         5.92         9.14           19         4.25         15.31         3.67         1.74         1.93         4.11         6.05         9.26           20         4.46         15.57         3.67         1.74         1.93         4.11         6.05         9.26           21         4.67         15.84         3.67         1.74         1.93         4.43         6.56         9.48           22         4.90         16.12         3.88         1.75         1.94         4.63         6.56         9.55           23         5.13         16.42         3.88         1.75         1.94         4.82         6.76         9.65           24         5.38         16.73         3.88         1.75         1.94         4.82         6.76         9.65           25         5.65         17.06         3.88				3.67	1.74	1.93	3.63		•
17         3.86         14.83         3.67         1.74         1.93         3.87         5.80         9.02           18         4.05         15.06         3.67         1.74         1.93         3.99         5.92         9.14           19         4.25         15.31         3.67         1.74         1.93         4.11         6.05         9.26           20         4.46         15.57         3.67         1.74         1.93         4.23         6.16         9.41           21         4.67         15.84         3.67         1.74         1.93         4.43         6.36         9.49           22         4.90         16.12         3.68         1.75         1.94         4.63         6.56         9.55           23         5.13         16.42         3.86         1.75         1.94         5.02         6.96         9.77           25         5.85         17.06         3.68         1.75         1.94         5.02         6.96         9.77           26         5.92         17.40         3.70         1.75         1.95         5.51         7.45         9.99           27         6.21         17.77         3.70					1.74	1.93	3.74	5.68	
18         4.05         15.06         3.67         1.74         1.93         3.99         5.92         9.14           19         4.25         15.31         3.67         1.74         1.93         4.11         6.05         9.26           20         4.46         15.57         3.67         1.74         1.93         4.43         6.36         9.41           21         4.67         15.84         3.67         1.74         1.93         4.43         6.36         9.48           22         4.90         16.12         3.68         1.75         1.94         4.63         6.56         9.55           23         6.13         16.42         3.68         1.75         1.94         4.62         6.76         9.65           24         5.38         16.73         3.68         1.75         1.94         5.02         6.96         9.77           25         5.55         17.06         3.68         1.75         1.94         5.02         6.96         9.77           26         6.92         17.40         3.70         1.75         1.95         5.51         7.46         9.95           27         6.21         17.77         3.70					1.74	1,93	3.87	5.80	
20					1.74	1.93	3.99	5.92	
21         4.67         15.84         3.67         1.74         1.93         4.23         6.16         9.44           22         4.90         16.12         3.68         1.75         1.94         4.63         6.56         9.55           23         5.13         16.42         3.68         1.75         1.94         4.82         6.76         9.65           24         5.38         16.73         3.68         1.75         1.94         5.02         6.96         9.77           25         5.65         17.06         3.68         1.75         1.94         5.02         6.96         9.97           26         5.92         17.40         3.70         1.75         1.95         5.51         7.45         9.99           27         6.21         17.77         3.70         1.75         1.95         5.79         7.73         10.03           28         6.52         18.15         3.70         1.75         1.95         6.08         8.02         10.13           29         6.84         18.55         3.71         1.76         1.95         6.55         8.31         10.25           30         7.78         19.43         3.71					1.74	1.93	4.11	6.05	9,26
22         4.90         16.12         3.68         1.75         1.94         4.63         6.56         9.55           23         5.13         16.42         3.68         1.75         1.94         4.82         6.76         9.65           24         5.38         16.73         3.68         1.75         1.94         5.02         6.96         9.77           25         5.65         17.06         3.68         1.75         1.94         5.02         6.96         9.77           26         5.92         17.40         3.70         1.75         1.95         5.51         7.45         9.95           27         6.21         17.77         3.70         1.75         1.95         5.51         7.45         9.95           28         6.52         18.15         3.70         1.75         1.95         6.08         8.02         10.13           29         6.84         18.55         3.71         1.76         1.95         6.35         8.31         10.25           30         7.18         18.98         3.71         1.76         1.95         6.64         8.59         10.38           31         7.54         19.43         3.71						1.93	4.23	6.16	9.41
23         5.13         16.42         3.86         1.75         1.94         4.82         6.76         9.55           24         5.38         16.73         3.68         1.75         1.94         5.02         6.96         9.77           25         5.85         17.06         3.68         1.75         1.94         5.02         7.16         9.90           26         5.92         17.40         3.70         1.75         1.95         5.51         7.45         9.95           27         6.21         17.77         3.70         1.75         1.95         5.51         7.73         10.03           28         6.52         18.15         3.70         1.75         1.95         6.08         8.02         10.13           29         6.84         15.55         3.71         1.76         1.96         6.35         8.31         10.25           30         7.18         18.98         3.71         1.76         1.95         6.64         8.59         10.38           31         7.54         19.43         3.71         1.76         1.95         6.84         8.59         10.38           32         7.92         19.90         3.71						1.93	4.43	6.36	9.48
24         5.38         16.73         3.68         1.75         1.94         5.02         6.96         9.77           25         5.65         17.06         3.68         1.75         1.94         5.02         7.16         9.90           26         5.92         17.40         3.70         1.75         1.95         5.51         7.45         9.95           27         6.21         17.77         3.70         1.75         1.95         5.79         7.73         10.03           28         6.52         18.15         3.70         1.75         1.95         6.08         8.02         10.13           30         7.18         18.98         3.71         1.76         1.95         6.84         8.59         10.38           31         7.54         19.43         3.71         1.76         1.95         6.92         8.87         10.55           32         7.92         19.90         3.71         1.76         1.95         6.92         8.87         10.55           33         8.32         20.40         3.72         1.76         1.96         7.49         9.45         10.95           34         8.74         20.92         3.72 <td></td> <td></td> <td></td> <td></td> <td></td> <td>1.94</td> <td>4.63</td> <td>6.56</td> <td>9,55</td>						1.94	4.63	6.56	9,55
25         5.55         17.06         3.68         1.75         1.94         5.22         7.16         9.90           26         5.92         17.40         3.70         1.75         1.95         5.51         7.46         9.95           27         6.21         17.77         3.70         1.75         1.95         5.79         7.73         10.03           28         6.52         18.15         3.70         1.75         1.95         6.08         8.02         10.13           29         6.84         18.55         3.71         1.76         1.95         6.35         8.31         10.25           30         7.18         18.89         3.71         1.76         1.95         6.84         8.59         10.38           31         7.54         19.43         3.71         1.76         1.95         6.92         8.87         10.55           32         7.92         19.90         3.71         1.76         1.95         7.21         9.16         10.74           33         8.32         20.40         3.72         1.76         1.96         7.49         9.45         10.95           34         8.74         20.92         3.72 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>4.82</td> <td>6.76</td> <td>9.65</td>							4.82	6.76	9.65
26         5.92         17.40         3.70         1.75         1.95         5.51         7.46         9.90           27         6.21         17.77         3.70         1.75         1.95         5.79         7.73         10.03           28         6.52         18.15         3.70         1.75         1.95         6.08         8.02         10.13           29         6.84         18.55         3.71         1.76         1.95         6.35         8.31         10.25           30         7.18         18.98         3.71         1.76         1.95         6.64         8.59         10.38           31         7.54         19.43         3.71         1.76         1.95         6.64         8.59         10.38           32         7.92         19.90         3.71         1.76         1.95         7.21         9.16         10.74           33         8.32         20.40         3.72         1.76         1.96         7.49         9.45         10.95           34         8.74         20.92         3.72         1.76         1.96         8.06         10.01         11.47           35         9.18         21.48         3.72<								6.96	9.77
27 6.21 17.77 3.70 1.75 1.95 5.79 7.73 10.03 28 6.52 18.15 3.70 1.75 1.95 6.08 8.02 10.13 29 6.84 18.55 3.71 1.76 1.95 6.35 8.31 10.25 30 7.18 18.98 3.71 1.76 1.95 6.84 8.69 10.38 31 7.54 19.43 3.71 1.76 1.95 6.92 8.87 10.55 32 7.92 19.90 3.71 1.76 1.95 7.21 9.16 10.74 33 8.32 20.40 3.72 1.76 1.96 7.49 9.45 10.95 34 8.74 20.92 3.72 1.76 1.96 7.49 9.45 10.95 35 9.18 21.48 3.72 1.76 1.96 7.78 9.73 11.19 36 9.65 22.06 3.73 1.77 1.96 8.06 10.01 11.47 36 9.65 22.06 3.73 1.77 1.96 8.97 10.94 11.74 38 10.66 23.32 3.74 1.77 1.96 8.97 10.94 11.74 39 11.20 24.01 3.74 1.77 1.97 9.43 11.40 11.92 40 11.79 24.73 3.74 1.77 1.97 9.89 11.86 12.14 41 12.40 25.50 3.76 1.78 1.98 1.98 10.27 13.24 13.08 43 13.75 27.19 3.77 1.78 1.98 1.98 11.27 13.24 13.08 44 14.49 28.11 3.77 1.78 1.98 1.98 11.73 13.71 13.48 44 14.49 28.11 3.77 1.78 1.98 1.98 11.73 13.71 13.48			,					7.16	9.90
28         6.52         18.15         3.70         1.75         1.95         6.08         8.02         10.13           29         6.84         18.55         3.71         1.76         1.95         6.35         8.31         10.25           30         7.18         18.98         3.71         1.76         1.95         6.64         8.59         10.38           31         7.54         19.43         3.71         1.76         1.95         6.92         8.87         10.55           32         7.92         19.90         3.71         1.76         1.95         7.21         9.16         10.74           33         8.32         20.40         3.72         1.76         1.96         7.49         9.45         10.95           34         8.74         20.92         3.72         1.76         1.96         7.78         9.73         11.19           35         9.18         21.48         3.72         1.76         1.96         8.06         10.01         11.47           36         9.65         22.06         3.73         1.77         1.96         8.97         10.94         11.74           38         10.66         23.32         3.								7.45	9,95
29         6.84         18.55         3.71         1.76         1.95         6.35         8.31         10.25           30         7.18         18.98         3.71         1.76         1.95         6.64         8.59         10.38           31         7.54         19.43         3.71         1.76         1.95         6.92         8.87         10.55           32         7.92         19.90         3.71         1.76         1.95         7.21         9.16         10.74           33         8.32         20.40         3.72         1.76         1.96         7.49         9.45         10.95           34         8.74         20.92         3.72         1.76         1.96         7.78         9.73         11.19           35         9.18         21.48         3.72         1.76         1.96         8.06         10.01         11.47           36         9.65         22.06         3.73         1.77         1.96         8.51         10.48         11.58           37         10.14         22.67         3.73         1.77         1.96         8.97         10.94         11.74           38         10.66         23.32								7.73	10.03
30         7.18         18.98         3.71         1.76         1.95         6.35         8.31         10.25           31         7.54         19.43         3.71         1.76         1.95         6.92         8.87         10.55           32         7.92         19.90         3.71         1.76         1.95         7.21         9.16         10.74           33         8.32         20.40         3.72         1.76         1.96         7.49         9.45         10.95           34         8.74         20.92         3.72         1.76         1.96         7.78         9.73         11.19           35         9.18         21.48         3.72         1.76         1.96         8.06         10.01         11.47           36         9.65         22.06         3.73         1.77         1.96         8.51         10.48         11.58           37         10.14         22.67         3.73         1.77         1.96         8.97         10.94         11.74           38         10.66         23.32         3.74         1.77         1.97         9.43         11.40         11.92           40         11.79         24.73 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>8.02</td><td>10.13</td></t<>								8.02	10.13
31         7.54         19.43         3.71         1.76         1.95         6.92         8.87         10.38           32         7.92         19.90         3.71         1.76         1.95         7.21         9.16         10.55           33         8.32         20.40         3.72         1.76         1.96         7.49         9.45         10.95           34         8.74         20.92         3.72         1.76         1.96         7.78         9.73         11.19           35         9.18         21.48         3.72         1.76         1.96         8.06         10.01         11.47           36         9.65         22.06         3.73         1.77         1.96         8.51         10.48         11.58           37         10.14         22.67         3.73         1.77         1.96         8.97         10.94         11.74           38         10.66         23.32         3.74         1.77         1.97         9.43         11.40         11.92           39         11.20         24.01         3.74         1.77         1.97         9.89         11.86         12.14           40         11.79         24.73									10.25
32									
33 8.32 20.40 3.72 1.76 1.96 7.49 9.45 10.95 34 8.74 20.92 3.72 1.76 1.96 7.78 9.73 11.19 35 9.18 21.48 3.72 1.76 1.96 8.06 10.01 11.47 36 9.65 22.06 3.73 1.77 1.96 8.51 10.48 11.58 37 10.14 22.67 3.73 1.77 1.96 8.97 10.94 11.74 38 10.66 23.32 3.74 1.77 1.97 9.43 11.40 11.92 39 11.20 24.01 3.74 1.77 1.97 9.89 11.86 12.14 40 11.79 24.73 3.74 1.77 1.97 9.89 11.86 12.14 41 12.40 25.50 3.76 1.78 1.98 10.81 12.79 12.72 42 13.06 26.32 3.76 1.78 1.98 10.81 12.79 12.72 43 13.75 27.19 3.77 1.78 1.98 11.73 13.71 13.48 44 14.49 28.11 3.77 1.78 1.98 11.73 13.71 13.48									
34 8.74 20.92 3.72 1.76 1.96 7.78 9.73 11.19 35 9.18 21.48 3.72 1.76 1.96 8.06 10.01 11.47 36 9.65 22.06 3.73 1.77 1.96 8.51 10.48 11.58 37 10.14 22.67 3.73 1.77 1.96 8.97 10.94 11.74 38 10.66 23.32 3.74 1.77 1.97 9.43 11.40 11.92 39 11.20 24.01 3.74 1.77 1.97 9.89 11.86 12.14 40 11.79 24.73 3.74 1.77 1.97 9.89 11.86 12.14 41 12.40 25.50 3.76 1.78 1.98 10.81 12.79 12.72 42 13.06 26.32 3.76 1.78 1.98 10.81 12.79 12.72 43 13.75 27.19 3.77 1.78 1.98 11.73 13.71 13.48 44 14.49 28.11 3.77 1.78 1.98 11.73 13.71 13.48									
35         9.18         21.48         3.72         1.76         1.96         8.06         10.01         11.47           36         9.65         22.06         3.73         1.77         1.96         8.51         10.48         11.58           37         10.14         22.67         3.73         1.77         1.96         8.97         10.94         11.78           38         10.66         23.32         3.74         1.77         1.97         9.43         11.40         11.94           39         11.20         24.01         3.74         1.77         1.97         9.89         11.86         12.14           40         11.79         24.73         3.74         1.77         1.97         10.35         12.32         12.41           41         12.40         25.50         3.76         1.78         1.98         10.81         12.79         12.72           42         13.06         26.32         3.76         1.78         1.98         11.27         13.24         13.08           43         13.75         27.19         3.77         1.78         1.98         11.73         13.71         13.48           44         14.49         28.11 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
36         9.65         22.06         3.73         1.77         1.96         8.51         10.48         11.58           37         10.14         22.67         3.73         1.77         1.96         8.97         10.94         11.58           38         10.66         23.32         3.74         1.77         1.97         9.43         11.40         11.92           39         11.20         24.01         3.74         1.77         1.97         9.89         11.86         12.14           40         11.79         24.73         3.74         1.77         1.97         10.35         12.32         12.41           41         12.40         25.50         3.76         1.78         1.98         10.81         12.79         12.72           42         13.06         26.32         3.76         1.78         1.98         11.27         13.24         13.08           43         13.75         27.19         3.77         1.78         1.98         11.73         13.71         13.48           44         14.49         28.11         3.77         1.78         1.98         12.19         14.17         13.94           45         15.26         29.08	35								
37         10.14         22.67         3.73         1.77         1.96         8.97         10.94         11.58           38         10.66         23.32         3.74         1.77         1.97         9.43         11.40         11.72           39         11.20         24.01         3.74         1.77         1.97         9.89         11.86         12.14           40         11.79         24.73         3.74         1.77         1.97         10.35         12.32         12.41           41         12.40         25.50         3.76         1.78         1.98         10.81         12.79         12.72           42         13.06         26.32         3.76         1.78         1.98         11.27         13.24         13.08           43         13.75         27.19         3.77         1.78         1.98         11.73         13.71         13.48           44         14.49         28.11         3.77         1.78         1.98         12.19         14.17         13.94           45         15.26         29.08         27.78         1.78         1.98         12.19         14.17         13.94	36								
38     10.66     23.32     3.74     1.77     1.97     9.43     11.40     11.72       39     11.20     24.01     3.74     1.77     1.97     9.89     11.86     12.14       40     11.79     24.73     3.74     1.77     1.97     10.35     12.32     12.41       41     12.40     25.50     3.76     1.78     1.98     10.81     12.79     12.72       42     13.06     26.32     3.76     1.78     1.98     11.27     13.24     13.08       43     13.75     27.19     3.77     1.78     1.98     11.73     13.71     13.48       44     14.49     28.11     3.77     1.78     1.98     12.19     14.17     13.94       45     15.26     29.08     27.78     1.78     1.98     12.19     14.17     13.94	37								
39 11.20 24.01 3.74 1.77 1.97 9.89 11.86 12.14 40 11.79 24.73 3.74 1.77 1.97 10.35 12.32 12.41 41 12.40 25.50 3.76 1.78 1.98 10.81 12.79 12.72 42 13.06 26.32 3.76 1.78 1.98 11.27 13.24 13.08 43 13.75 27.19 3.77 1.78 1.98 11.73 13.71 13.48 44 14.49 28.11 3.77 1.78 1.98 12.19 14.17 13.94	38	10.66							
40     11.79     24.73     3.74     1.77     1.97     10.35     12.32     12.41       41     12.40     25.50     3.76     1.78     1.98     10.81     12.79     12.72       42     13.06     26.32     3.76     1.78     1.98     11.27     13.24     13.08       43     13.75     27.19     3.77     1.78     1.98     11.73     13.71     13.48       44     14.49     28.11     3.77     1.78     1.98     12.19     14.17     13.94       45     15.26     29.08     27.78     1.78     1.98     12.19     14.17     13.94	39	11.20	24.01						
41     12.40     25.50     3.76     1.78     1.98     10.81     12.79     12.72       42     13.06     26.32     3.76     1.78     1.98     11.27     13.24     13.08       43     13.75     27.19     3.77     1.78     1.98     11.73     13.71     13.48       44     14.49     28.11     3.77     1.78     1.98     12.19     14.17     13.94       45     15.26     29.08     2.78     1.78     1.98     12.19     14.17     13.94	40	11.79				the state of the s			
42     13.06     26.32     3.76     1.78     1.98     11.27     13.24     13.08       43     13.75     27.19     3.77     1.78     1.98     11.73     13.71     13.48       44     14.49     28.11     3.77     1.78     1.98     12.19     14.17     13.94       45     15.26     29.08     2.78     1.78     1.98     12.19     14.17     13.94	41	12.40							
43 13.75 27.19 3.77 1.78 1.98 11.73 13.71 13.48 44 14.49 28.11 3.77 1.78 1.98 12.19 14.17 13.94	42	13.06							
44 14.49 28.11 3.77 1.78 1.98 12.19 14.17 13.94 45 15.26 29.08 2.78	43	13.75							
45 15.26 20.08 2.70 4.70	44	14.49	28.11	3.77			•		
	45	15.26	29.08	3.78					

Table 2

FEN	1 / 2	_	TO	DΛ	^	_	_
FEN	ML	_	10	ВΜ		۰	u

	CHALL TODA	(1)	(2)	(2)		,		
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
		MAXIMUM	FIRST	AVERAGE	(2) + (3)		(4) + (5)	(1) - (6)
	NET LEVEL	FIRST YEAR	YEAR	RENEWAL	INITIAL	AR'A VIGALINA		
ISSUE	ANNUAL	EXPENSE	EXPENSE	EXPENSE	ACQUIS	MAXIMUM		UNUSED
AGE	PREMIUM	ALLOWANCE	CHARGE		EXPENSE	SURRENDER	TOTAL	EXPENSE
7.02	1 IVEINION	ALLOWANCE	CHARGE	CHARGE	CHARGE	CHARGE	CHARGES	ALLOWANCE
46	16.09	30,11	3.78	1.79				
47	16.96	31.20	3.79	1.79	1.99 2.00	13.28	15.27	14.84
48	17.88	32.35	3.79	1.80	2.00	13.91	15.91	15.29
49	18.85	33.56	3.80	1.80	2.00	. 14.55 15.18	16.55	15.80
50	19.86	34.83	3.80	1.80	2.00	15.16	17.19	16.38
51	20.93	36.16	3.82	1.81	2.01	16,45	17.82	17.01
52	22.05	37,56	3.83	1.81	2.01	17.09	18.46	17.70
53	23.22	39.03	3.83	1.81	2.01	17.72	19.11	18.46
54	24.45	40.56	3.84	1.82	2.02	18.36	19.74	19.29
55	25.74	42.18	3.85	1.82	2.02	18.99	20.38	20.18
56	27.09	43.87	4.10	1.94	2.16	20.03	21.02 22.19	21.16
57	28.51	45.64	4.12	1.95	2.17	21.08	23.24	21.67
58	30.00	47.50	4.13	1.96	2.17	22.12	24.29	22.40
59	31.58	49.47	4.14	1.96	2.18	22,50	24.68	23.21 24.79
60	33.23	51.54	4.15	1.97	2.19	22.50	24.69	24.79 26.86
61	34.98	53.73	4.16	1.97	2.19	22.50	24,69	29.04
62	36.84	56.05	4.19	1.98	2.20	22.50	24.70	31.35
63	38.80	58.50	4.20	1.99	2.21	22.50	24,71	33.79
64	40.89	60.00	4.22	2.00	2.22	22.50	24.72	35.28
65	43.11	60.00	4.24	2.01	2.23	22.50	24.73	35.27
66	45.47	60.00	4.26	2.02	2.24	22.50	24.74	35,26
67	48.00	60.00	4.30	2.03	2.26	22.50	24.76	35.24
68	50.69	60.00	4.32	2.05	2.27	22.50	24.77	35.23
69	53,57	60.00	4.36	2.06	2.29	22.50	24.79	35,21
70	56.64	60.00	4.39	2.08	2.31	22.50	24.81	35.19
71	59.92	√ 60.00	4.44	2.10	2.34	22.50	24.84	35,16
72	63.40	60.00	4.50	2.13	2.37	22.50	24.87	35.13
73	67.11	60.00	4.57	2.17	2.41	22.50	24.91	35.09
74	71.05	60.00	4.67	2.21	2.46	22.50	24.96	35.04
75	75,24	60.00	4.79	2.27	2.52	22.50	25.02	34.98
76	79.72	60.00	4.97	2.35	2.61	22.50	25.11	34.89
77	84.52	60.00	5.24	2:48	2.76	22.50	25,26	34.74
78	89.67	60.00	5.77	2.73	3.04	22.50	25.54	34.46
79	95.22	60.00	7.25	3,43	3.81	22.50	26.31	33.69
80	101.20	60.00	8.72	4.13	4.59	22.50	27.09	32.91
81	107.68	60.00	10.20	4.83	5.37	22.50	27.87	32.13
82	114.43	60.00	11.68	5.53	6.15	22.50	28.65	31.35
83	121.40	60.00	13.15	6.23	6.92	22.50	29.42	30.58
84 85	128.67	60.00	14.64	6.93	7.71	22.50	30.21	29.79
00	136.21	60.00	16.12	7.63	8.48	22.50	30.98	29.02

Table 3

20

#### Male Nontobacco

Initial Expense Allowance: Total Initial Acquisition Exp Chg:

15.00

1.93

Unamortized and Unused

		Evnence	Allowance		
Policy	Attained	New	Allowance		
					Surrender
Year	Age	Issue	Increase		Charge
. 1	20	13.07	13.07		3.74
2	21	13.03	13.03		
. 3	22	12.99			3.36
4	23		12.99		3.10
5		12.94	12.94		2.84
5	24	12.89	12.89		2.58
6	25	12.84	12.84		2.32
7	26	12.78	12.78		2.05
8	27	12.73	12.73		
9	28	12.67	12.67		1.79
10	29	12.61			1.53
10	25	12.01	12.61		1.27
11	30	12.54	12.54		1.01
12	31	12.47	12.47		0.75
13	32	12.40	12.40		0.49
14	33	12.32	12.32		
15	34	12.25			0.22
	0.1	12.20	12.25		-
16	35	12.16	12.16		
21	40	11.69	11.69		
26	45	11.11	11.11		
31	50	10.42	10.42		
36	55	9.61	9.61		
		0.01	9.01	ų.	
41	60	8.68	8.68		
46	65	7.66	7.66		
51	70	6.58	6.58		
56	75	5.45	5.45		
61	80	4.33	4.33		
			1.00		
66	85	3.34	3.34		
71	90	2.55	2.55		
76	95	1.99	1.99		
81	100	1.58	1.58		
86	105	1.29	1.29		
91	110	1.02			
		1.03	1.03		
96	115	0.81	0.81		
97	116	0.77	0.77		
98	117	0.73	0.73		
99	118	0.69	0.69		
100	119	0.67	0.67		
101	120	-	-		

35

#### Male Nontobacco

Initial Expense Allowance:

. 19,84

Total Initial Acquisition Exp Chg:

1.96

#### Unamortized and Unused Expense Allowance

		Expense	Allowance	
Policy	Attained	New		Surrender
Year	Age	Issue	Increase	Charge
1	35	17.88	47.00	0.57
2	36	17.75	17.88	6.57
3	37		17.75	5.91
4		17.62	17.62	5.45
5	38	17.48	17.48	4.99
5	39	17.33	17.33	4.53
6	40	17.18	17.18	4.07
7	41	17.02	17.02	3.61
8	42	16.86	16.86	3.15
9	43	16.69	16.69	2.69
10	44	16.51	16.51	2.23
11	45	16.33	16.33	4 77
12	46	16.14		1.77
13	47	15.95	16.14	1.31
14	47 48		15.95	0.85
15	49	15.75	15.75	0.39
15	49	15.54	15.54	- -
16	50	15.32	15.32	
21	55	14.12	14.12	
26	60	12.76	12.76	
31	65	11.26	11.26	
36	70	9.67	9.67	
41	75	8.00	8.00	
46	80	6.36	6.36	
51	85	4.91	4.91	
56	90	3.75		
61	95	2.93	3.75	
01	30	2.93	2.93	
66	100	2.33	2.33	
71	105	1.90	1.90	
76	110	1.51	1.51	
81	115	1.19	1.19	
82	116	1.13	1.13	
83	117	1.07	1.07	
84	118	1.02	1.02	
85	119	0.99	0.99	
86	120	-	-	

Table 3

65

Male Nontobacco

60.00

Initial Expense Allowance: Total Initial Acquisition Exp Chg:

2.24

Unamortized and Unused Expense Allowance

	•	e Allowance	
Attained	New		Surrender
Age	Issue	Increase	Charge
			22.50
		56.17	20.25
		54.57	18.68
		52.94	17.10
69	51.29	51.29	15.53
70	49.61	49 61	13.95
			12.38
			10.80
			9.23
			7.65
		72.10	7.00
75	41.05	41.05	6.08
	39.34	39.34	4.50
77	37.63	37.63	2.93
78	35.93	35.93	1.35
79	34.26	34.26	-
80	22.62	20.00	
100	11.93	11.93	
105	9.72	9.72	
110	7.77	7.77	
115	6.09	6.09	
116	5.79	5.79	
117	5.50	5.50	
118	5.22	5.22	
119	5.09	5.09	
120	<b>-</b> ·	<del>-</del>	
	76 77 78 79 80 85 90 95 100 105 110 115 116 117 118	Attained Age Issue  65 57.76 66 56.17 67 54.57 68 52.94 69 51.29  70 49.61 71 47.90 72 46.18 73 44.47 74 42.76  75 41.05 76 39.34 77 37.63 78 35.93 79 34.26  80 32.63 85 25.16 90 19.22 95 15.00 100 11.93  105 9.72 110 7.77 115 6.09 116 5.79 117 5.50 118 5.22 119 5.09	Age         Issue         Increase           65         57.76         57.76           66         56.17         56.17           67         54.57         54.57           68         52.94         52.94           69         51.29         51.29           70         49.61         49.61           71         47.90         47.90           72         46.18         46.18           73         44.47         44.47           74         42.76         42.76           75         41.05         41.05           76         39.34         39.34           77         37.63         37.63           78         35.93         35.93           79         34.26         34.26           80         32.63         32.63           85         25.16         25.16           90         19.22         19.22           95         15.00         15.00           100         11.93         11.93           105         9.72         9.72           110         7.77         7.77           115         6.09         6.09

Table 3

85

Male Nontobacco

60.00

Initial Expense Allowance: Total Initial Acquisition Exp Chg:

9.44

Unamortized and Unused Expense Allowance

			ise Allowance	
Policy	Attained	New		Surrender
Year	Age	Issue	Increase	Charge
1	85	50.56	50.56	22.50
2	. 86	47.87	47.87	20.25
3	87	45.32	45.32	18.68
4	88	42.92	42.92	17.10
5	89	40.69	40.69	15.53
6	90	38.62	38.62	13.95
7	91	36.72	36.72	12.38
8	92	34.92	34.92	10.80
9	93	33.22	33.22	9.23
10	94	31.63	31.63	7.65
11	95	30.14	30.14	6.08
12	96	28.78	28.78	4.50
13	97	27.48	27.48	2.93
14	98	26.23	26.23	1.35
15	99	25.05	25.05	-
16	100	23.98	23.98	
21	105	19.53	19.53	
26	110	15.61	15.61	
27	111	14.89	14.89	
28	112	14.19	14.19	
29	113	13.52	13.52	
30	114	12.87	12.87	
31	115	12.24	12.24	
32	116	11.63	11.63	
33	117	11.05	11.05	
34	118	10.49	10.49	
35	119	10.22	10.22	
36	120	-	- ·	

Table 4 - Form FL-08(S)
Flexible Premium Adjustable Life
Maximum Surrender Charge Premiums

	Male	Male		Male		Female	Female		Female	
Issue	Preferred	Preferred	Male	Preferred	Male	Preferred	Preferred	Female	Preferred	Female
Age	Plus NT	NT	Nontobacco	Tobacco	Tobacco	Plus NT	NT	Nontobacco	Tobacco	Tobacco
							<del></del>		100000	robacco
0	2.50	2.50	2.50	2.50	2.50	2.00	2.00	2.00	2.00	2.00
1	2.65	2.65	2.65	2.65	2.65	2.14	2.14	2.14	2.14	
2	2.80	2.80	2.80	2.80	2.80	2.27	2.14	2.14		2.14
3	2.94	2.94	2.94	2.94	2.94	2.41			2.27	2.27
4	3.09	3.09	3.09	3.09	3.09		2.41	2.41	2.41	
5	3.24	3.24	3.09	3.09		2.54	2.54	2.54	2.54	2.54
6	3.39	3.39	3.39		3.24	2.68	2.68	2.68	2.68	2.68
7	3.53	3.53	3.53	3.39	3.39	2.81	2.81	2.81	2.81	2.81
8	3.68			3.53	3.53	2.95	2.95	2.95	2.95	2.95
9	3.83	3.68	3.68	3.68	3.68	3.08	3.08	3.08	3.08	3.08
10		3.83	3.83	3.83	3.83	3.22	3.22	3.22	3.22	3.22
	3.98	3.98	3.98	3.98	3.98	3.35	3.35	3.35	3.35	3.35
11	4.12	4.12	4.12	4.12	4.12	3.49	3.49	3.49	3.49	3.49
12	4.27	4.27	4.27	4.27	4.27	3.62	3.62	3.62	3.62	3.62
13	4.42	4.42	4.42	4.42	4.42	3.76	3.76	3.76	3.76	3.76
14	4.57	4.57	4.57	4.57	4.57	3.89	3.89	3.89	3.89	3.89
15	4.71	4.71	4.71	4.71	4.71	4.03	4.03	4.03	4.03	4.03
16	4.86	4.86	4.86	4.86	4.86	4.16	4.16	4.16	4.16	4.16
17	5.01	5.01	5.01	5.01	5.01	4.30	4.30	4.30	4.30	4.30
18	5.16	5.16	5.16	5.16	5.16	4.43	4.43	4.43	4.43	4.43
19	5.30	5.30		5.30	5.30	4.57	4.57	4.57	4.57	4.57
20	3.35	3.55	4.15	4.80	5.45	2.65	3.00	3.35	4.05	4.70
21.	3.48	3.69	4.30	5.16	5.78	2.76	3.12	3.54	4.26	4.92
22	3.61	3.83	4.45	5.52	6.11	2.87	3.24	3.73	4.47	5.14
23	3.74	3.97	4.60	5.88	6.44	2.98	3.36	3.92	4.68	5.36
24	3.87	4.11	4.75	6.24	6.77	3.09	3.48	4.11	4.89	5.58
25	4.00	4.25	4,90	6.60	7.10	3.20	3.60	4.30	5.10	5.80
26	4.21	4.46	5.14	6.92	7.49	3.37	3.75	4.47	5.37	6.12
27	4.42	4.67	5.38	7.24	7.88	3.54	3.90	4.64	5.64	6.43
28	4.63	4.89	5.62	7.56	8.27	3.71	4.05	4.81	5.91	6.75
29	4.84	5.10	5.86	7.88	8.66	3.88	4.20	4.98	6.18	7.06
30	5.05	5.31	6.10	8.20	9.05	4.05	4.35	5.15	6.45	7.38
31	5.26	5.52	6.34	8.52	9.44	4.22	4.50	5.32	6.72	7.69
32	5.47	5.73	6.58	8.84	9.83	4.39	4.65	5.49	6.99	7.09 8.01
33	5.68	5.95	6.82	9.16	10.22	4.56	4.80	5.66	7.26	
34	5.89	6.16	7.06	9.48	10.61	4.73	4.95	5.83		8.32
-35	6.10	6.37	7.30	9.80	11.00	4.90	5.10	6.00	7.53	8.64
36	6.39	6.68	7.68	10.37	11.70	5.14	5.10		7.80	8.95
37	6.68	6.99	8.06	10.94	12.40	5.38		6.32	8.25	9.46
38	6.97	7.29	8.44	11.51	13.10		5.62	6.64	8.70	9.97
39	7.26	7.60	8.82	12.08		5.61	5.88	6.96	9.15	10.48
40	7.55	7.91	9.20		13.80	5.85	6.14	7.28	9.60	10.99
41	7.84	8.22	9.20	12.65	14.50	6.09	6.40	7.60	10.05	11.50
42	8.13	8.53		13.22	15.20	6.33	6.66	7.92	10.50	12.01
43	8.42	8.83	9.96	13.79	15.90	6.57	6.92	8.24	10.95	12.52
43 44	8.71		10.34	14.36	16.60	6.80	7.18	8.56	11.40	13.03
44 45	9.00	9.14	10.72	14.93	17.30	7.04	7.44	8.88	11.85	13.54
43	9.00	9.45	11.10	15.50	18.00	7.28	7.70	9.20	12.30	14.05

Table 4 - Form FL-08(S)
Flexible Premium Adjustable Life
Maximum Surrender Charge Premiums

	Male	Male		Male		Female	Female		Female	
Issue	Preferred	Preferred	Male	Preferred	Male	Preferred	Preferred	Female	Preferred	Female
<u>Age</u>	Plus NT	NT	<u>Nontobacco</u>	<u>Tobacco</u>	<u>Tobacco</u>	Plus NT	NT	<u>Nontobacco</u>	Tobacco	Tobacco
46	9.55	10.01	11.84	16.45	19.10	7.70	8.13	9.73	13.02	14.76
47	10.10	10.56	12.58	17.40	20.20	8.12	8.56	10.26	13.74	
48	10.65	11.12	13.32	18.35	21.30	8.55	8.99	10.79	14.46	16.17
49	11.20	11.67	14.06	19.30	22.40	8.97	9.42	11.32	15.18	16.87
50	11.75	12.23	14.80	20.25	23.50	9.39	9.85	11.85	15.90	17.58
51	12.30	12.78	15.54	21.20	24.60	9.81	10.28	12.38	16.62	18.28
52	12.85	13.34	16.28	22.15	25.70	10.23	10.71	12.91	17.34	18.99
53	13.40	13.89	17.02	23.10	26.80	10.66	11.14	13.44	18.06	19.69
54	13.95	14.45	17.76	24.05	27.90	11.08	11.57	13.97	18.78	20.40
55	14.50	. 15.00	18:50	25.00	29.00	11.50	12.00	14.50	19.50	21.10
56	15.30	15.96	19.54	26.80	30,60	12.10	12.70	15.37	20.40	22.26
57	16.10	16.92	20.58	28.60	32.20	12.70	13.40	16.25	21.30	23.42
58	16.90	17.88	21.62	30.40	33.80	13.30	14.10	17.12	22.20	24.58
59	17.70	18.84	22.66	32.20	35.40	13.90	14.80	18.00	23.10	25.74
60	18.50	19.80	23.70	34.00	37.00	14.50	15.50	18.87	24.00	26.90
61	19.36	20.81	24.88	35.10	38.60	15.35	16.34	19.82	25.02	28.02
62	20.22	21.82	26.06	36.20	40.20	16.20	17.18	20.76	26.04	29.14
63	21.08	22.83	27.24	37.30	41.80	17.05	18.02	21.71	27.06	30.26
64	21.94	23.84	28.42	38.40	43.40	17.90	18.86	22.65	28.08	31.38
65	22.80	24.85		39.50	45.00	18.75	19.70	23.60	29.10	32.50
66	23.98	26.28	31.58	41.80	47.32	20.06	21.04	25.18	30.68	34.60
67	25.16	27.71	33.56	44.10	49.64	21.37	22.38	26.76	32.26	36.70
68	26.34	29.14	35.54	46.40	51.96	22.68	23.72	28.34	33.84	38.80
69	27.52	30.57	37.52	48.70	54.28	23.99	25.06	29.92	35.42	40.90
70	28.70	32.00	39.50	51.00	56,60	25.30	26.40	31.50	37.00	43.00
71	30.12	33.74	41.77	53.22	59.40	26.30	27.84	33.20	39.00	44.60
72	31.54	35.48	44.03	55.44	62.20	27.30	29.28	34.90	41.00	46.20
73	32.96	37.22	46.30	57.66	65,00	28.30	30.72	36.60	43.00	47.80
74	34.38	38.96	48.56	59.88	67.80	29.30	32.16	38.30	45.00	49.40
75	35.80	40.70	50.83	62.10	70.60	30.30	33.60	40.00	47.00	51.00
76	40.72	45.63	55.24	66.39	74.74	33.62	37.34	43.80	50.90	55.10
.77	45.64	50.56	59.66	70.68	78.88	36.94	41.08	47.60	54.80	59.20
78	50.56	55.49	64.08	74.97	83.02	40.26	44.82	51.40	58.70	63.30
79	55.48	60.42	68.50	79.26	87.16	43.58	48.56	55.20	62.60	67.40
80	60.40	65.35	72.91	83.55	91.30	46.90	52.30	59.00	66.50	71.50
81	65.32	70.28	77,33	87.84	95.44	50.22	56.04	62.80	70.40	75.60
82	70.24	75.21	81.75	92.13	99.58	53.54	59.78	66.60	74.30	79.70
83	75.16	80.14	86.17	96.42	103.72	56.86	63.52	70.40	78.20	83.80
84	80.08	85.07	90.58	100.71	107.86	60.18	67.26	74.20	82.10	87.90
85	85.00	90.00	95.00	105.00	112.00	63.50	71.00	78.00	86.00	92.00

# Table 5 - Form FL-08(S) Flexible Premium Adjustable Life Monthly Per \$1,000 of Specified Amount Charges

	Male	Male		Male		Female	Female		Female	
Issue		d Preferred		Preferred	Male	Preferred	Preferred	Female	Preferred	Female
<u>Age</u>	Plus NT	NT	Nontobacco	Tobacco	Tobacco	Plus NT	NT	Nontobacco	Tobacco	Tobacco
0	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
1	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
2	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
3	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
4	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
- 5	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
6	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
7	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
8	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
9	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
10	0.325	0.325	0.325	0,325	0.325	0.306	0.306	0.306	0.306	0.306
11	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
12	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
13	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
14	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
15	0.325	0,325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
16	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
17	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
18	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0.306	0.306	0.306
19	0.325	0.325	0.325	0.325	0.325	0.306	0.306	0,306	0.306	0.306
20	0.302	0.305	0.305	0.325	0.325	0.293	0.294	0.295	0.301	0.306
21	0.303	0.305	0.305	0.325	0.325	0.293	0.294	0.295	0.301	0.306
22	0.303	0.306	0.306	0.325	0.325	0.293	0.294	0.296	0.301	0.307
23	0.303	0.306	0.306	0.326	0.326	0.293	0.294	0.296	0.301	0.307
24	0.303	0.306	0.306	0.326	0.326	0.294	0.294	0.296	0.302	0.307
25	0.303	0.307	0.307	0.327	0.327	0.294	0.295	0.296	0.302	0.307
26	0.304	0.307	0.307	0.327	0.327	0.294	0.295	0.296	0.302	0.308
27	0.304	0.307	0.307	0.327	0.327	0.294	0.295	0.297	0.302	0.308
28	0.304	0.307	0.307	0.328	0.328	0.294	0.295	0.297	0.303	0.308
29	0.304	0.308	0.308	0.328	0.328	0.295	0.295	0.297	0.303	0.309
30	0.305	0.308	0.308	0.329	0.329	0.295	0.296	0.297	0.303	0.309
31	0.305	0.308	0.308	0.329	0.329	0.295	0.296	0.297	0.303	0.309
32	0.305	0.309	0.309	0.330	0.330	0.295	0.296	0.298	0.304	0.309
33	0.306	0.309	0.309	0.330	0.330	0.295	0.296	0.298	0.304	0.310
34	0.306	0.310	0.310	0.330	0.331	0.296	0.297	0.298	0.304	0.310
35	0.306	0.310	0.310	0.331	0.331	0.296	0.297	0.299	0.304	0.310
36	0.306	0.310	0.310	0.331	0.332	0.296	0.297	0.299	0.305	0.311
37	0.307	0.311	0.311	0.332	0.332	0.296	0.297	0.299	0.305	0.311
38	0.307	0.311	0.311	0.332	0.333	0.297	0.298	0.299	0.305	0.312
39	0.308	0.312	0.312	0.333	0.333	0.297	0.298	0.300	0.306	0.312
40	0.308	0.312	0.312	0.333	0.334	0.297	0.298	0.300	0.306	0.312
41	0.308	0.313	0.313	0.334	0.335	0.298	0.299	0.300	0.307	0.313
42	0.309	0.313	0.313	0.334	0.335	0.298	0.299	0.301	0.307	0.313
43	0.309	0.314	0.314	0.335	0.336	0.298	0.299	0.301	0.307	0.314
44	0.310	0.314	0.314	0.336	0.337	0.299	0.300	0.301	0.308	0.314
45	0.310	0.315	0.315	0.336	0.337	0.299	0.300	0.302	0.308	0.315

# Table 5 - Form FL-08(S) Flexible Premium Adjustable Life Monthly Per \$1,000 of Specified Amount Charges

	Male	Male		Male		Female	Female		Female	
Issue		Preferred		Preferred	Male	Preferred	Preferred	Female	Preferred	Female
<u>Age</u>	Plus NT	NT .	<u>Nontobacco</u>	Tobacco	Tobacco	Plus NT	NT	Nontobacco	Tobacco	Tobacco
				-					100000	TODACCO
46	0.310	0.315	0.315	0.337	0.338	0.299	0.300	0.302	0.309	0.315
47	0.311	0.316	0.316	0.338	0.339	0.300	0.301	0.303	0.309	0.316
48	0.311	0.316	0.316	0.339	0.340	0.300	0.301	0.303	0.310	0.316
49	0.312	0.317	0.317	0.339	0.341	0.301	0.302	0.304	0.310	0.317
50	0.313	0.318	0.318	0.340	0.342	0.301	0.302	0.304	0.311	0.317
51	0.313	0.319	0.319	0.341	0.342	0.302	0.303	0.305	0.311	0.318
52	0.314	0.319	0.319	0.342	0.344	0.302	0.303	0.305	0.312	0.319
53	0.315	0.320	0.320	0.343	0.345	0.303	0.304	0.306	0.313	0.319
54	0.315	0.321	0.321	0.344	0.346	0.303	0.304	0.306	0.313	0.320
55	0.316	0.322	0.322	0.345	0.347	0.304	0.305	0.307	0.314	0.321
56	0.337	0.342	0.342	0.366	0.378	0.325	0.326	0.328	0.335	0.342
57	0.338	0.343	0.343	0.367	0.380	0.325	0.326	0.328	0.336	0.343
58	0.339	0.344	0.344	0.369	0.381	0.326	0.327	0.329	0.337	0.344
59	0.340	0.345	0.345	0.370	0.383	0.327	0.328	0.330	0.337	0.345
60	0.341	0.347	0.347	0.372	0.385	0.328	0.329	0.331	0.338	0.346
61	0.342	0.348	0.348	0.373	0.386	0.329	0.330	0.332	0.340	0.347
62	0.343	0.349	0.350	0.375	0.388	0.330	0.331	0.333	0.341	0.349
63	0.344	0.351	0.351	0.377	0.391	0.331	0.332	0.334	0.342	0.350
64	0.346	0.352	0.353	0.379	0.393	0.332	0.333	0.336	0.344	0.352
65	0.348	0.354	0.355	0.382	0.396	0.333	0.335	0.337	0.345	0.353
66	0.349	0.356	0.367	0.384	0.399	0.335	0.336	0.339	0.347	0.355
67	0.351	0.358	0.370	0.387	0.402	0.337	0.338	0.340	0.349	0.358
68	0.354	0.361	0.373	0.391	0.406	0.339	0.340	0.342	0.351	0.360
69	0.357	0.364	0.376	0.395	0.410	0.341	0.342	0.345	0.354	0.363
70	0.360	0.367	0.380	0.399	0.415	0.343	0.345	0.347	0.357	0.366
71	0.363	0.371	0.385	0.404	0.421	0.346	0.348	0.351	0.361	0.370
72	0.368	0.376	0.390	0.411	0.429	0.350	0.352	0.355	0.365	0.375
73	0.373	0.382	0.397	0.419	0.438	0.355	0.356	0.359	0.370	0.381
74	0.381	0.390	0.406	0.429	0.449	0.360	0.362	0.365	0.377	0.389
75	0.390	0.400	0.417	0.443	0.465	0.368	0.370	0.374	0.386	0.399
76	0.404	0.415	0.434	0.462	0.487	0.379	0.381	0.385	0.400	0.414
77 72	0.425	0.438	0.460	0.493	0.521	0.397	0.399	0.404	0.420	0.437
78	0.466	0.483	0.510	0.552	0.587	0.430	0.433	0.439	0.460	0.481
79	0.580	0.607	0.651	0.717	0.773	0.524	0.529	0.538	0.571	0.604
80	0.695	0.731	0.791	0.881	0.959	0.618	0.624	0.637	0.682	0.727
81	0.809	0.855	0.932	1.046	1.144	0.711	0.719	0.736	0.793	0.850
82	0.924	0.980	1.072	1.211	1.330	0.805	0.815	0.835	0.904	0.973
83	1.038	1.104	1.213	1.376	1.515	0.899	0.910	0.933	1.015	1.096
84	1.153	1.228	1.353	1.541	1.701	0.992	1.006	1.032	1.126	1.220
85	1.267	1.353	1.494	1.705	1.887	1.086	1.101	1.131	1.237	1.343

#### Statutory Reserves Form FL-08(S)

Because the No-Lapse guarantee is embedded in the policy, the reserves will be the greater of the reserve calculated under the Commissioner's Reserve Valuation Method (CRVM) for Fiexible Premium Adjustable Life and the reserve calculated using Actuarial Guideline XXXVIII (AG38) methodology. The description and demonstration of the AG38 reserve can be found in the attachment to this memorandum.

The following items will be calculated at time of policy issue.

Guaranteed Maturity Premium (GMP) - The GMP is the level annual gross premium paid to age 121, which will endow the policy at age 121. The GMP is calculated based on the underwriting classification, plan of insurance purchased and policy guarantees including expense charges, interest rates and mortality charges.

Guaranteed Maturity Fund (GMF) - The GMF is an accumulation fund value defined for each duration using guaranteed expense charges, interest rates and mortality charges, and assuming the GMP's are paid.

Future Benefits (FB) - The FB are the Death Benefits associated with each of the GMF values, defined for all policy durations. These Future Benefits are based on the Death Benefit Option (Specified Amount includes Policy Value or Specified Amount does not include Policy Value) and the percentage of Policy Value factors in Section 8 of Form FL-08(S), if applicable.

<u>Present Value of Future Benefits</u> (PVFB $_{
m I}$ ) - The PVFB at issue is the value of the future benefits, discounted for interest and mortality that correspond to the valuation basis for the year of issue. The mortality used is based on the 2001 CSO Preferred Class Structure Sex Distinct Mortality Table, Age Nearest Birthday.

$$PVFB_{I} = \frac{1 * \frac{1 *}{2} - x}{1_{x} t = 1} \begin{bmatrix} (1_{x+t-1} - 1_{x+t}) * FB_{t} \\ t \\ 11 (1+i_{k}) \\ k = 1 \end{bmatrix}$$

where:

x = issue age

 $l_{x+t}$ = number of lives at age x+t using valuation mortality

 $i_k$ = valuation interest rate for duration k

SA = Specified Amount at issue

CRVM Expense Allowance ( $E^{CRVM}$ ) - The  $E^{CRVM}$  is equal to (a)-(b) where:

(a) is (i) the net level annual premium for the contract as if issued at an age one year older with premiums payable one year less and maturing at the same age, but not greater than (ii) a net level annual premium for a 19 pay whole life contract issued at an age one year older.

(ii) ELRA \* 19Px+1

where, ELRA is the Equivalent Level Renewal Amount

ELRA= 
$$\stackrel{\text{(121-x)}-2}{=}$$
 FBj+2 \* v<sup>j+1</sup> \* jp<sub>x+1</sub> \* q<sub>x+j+1</sub>
 $\stackrel{\text{j=0}}{=}$   $\stackrel{\text{A}_{x+1}}{=}$ 

and,

$$19^{P}_{X+1}=A_{X+1}/a_{X+1}:19$$

(b) is the net one year term insurance premium for the benefit provided in the first year.

The following items will be calculated at each valuation date.

 $\underline{\text{Cash Value}}$  (CV\_m) - The CV\_m is the accumulated fund value of the policy, at the time of valuation.

Net Surrender Value ( $CSV_m$ ) - The  $CSV_m$  is the cash value of the policy less the surrender charge, if any, at the time of valuation.

Ratio (r) - equals  $CV_m$  divided by  $GMF_m$ .

If the ratio r is less than zero or greater than one, then it should be set equal to one.

Future Benefits (FB) - Using the greater of  $\text{CV}_m$  or  $\text{GMF}_m$  as a starting value on the valuation date, future benefits are calculated assuming guaranteed interest, mortality and expense charges, with GMP's paid on the policy anniversaries.

<u>Present Value of Future Benefits</u> ( $PVFB_m$ ) - The PVFB at the time of valuation is the value of the Future Benefits, discounted for interest and mortality using the valuation basis.

Net Level Premium Reserves (NLR $_{m}$ ) - The net level premium reserves are equal to ((A) - (B)) \* r where:

- (A) is PVFB<sub>m</sub>
- (B) is PVNLP = NLP \*  $a_{x+m}$ where NLP = PVFB<sub>I</sub> /  $a_x$

r is the ratio defined above.

CRVM Reserve (CRVMm) - The CRVM at time of valuation m is defined as follows:

$$CRVM_m = NLR_m - (E^{CRVM} * a_{\underline{x+m}} * r)$$

#### STATUTORY RESERVES FORM FL-08(S) SAMPLE CALCULATION

Male, Age 35, Nonsmoker \$100,000 Specified Amount Issue Date = 5/1/08

Guaranteed Maturity Premium (GMP) = 1,689.15

Guaranteed Maturity Fund (GMF) - see attached Table

Future Benefits (FB) - see attached Table

<u>Present Value of Future Benefits</u> ( $PVFB_I$ ) - using 4% interest and the 2001 CSO Residual Standard Nonsmoker Mortality Table, the  $PVFB_I$  = 20,801.85

CRVM Expense Allowance (ECRVM) -

(a) (i) the net level annual premium issued one year older = \$1,053.62

(ii) ELRA \* 
$$_{19}P_{X+1} = $1,602.81$$

ELRA =\$100,000

$$_{19}P_{x+1} = .016028$$

(b) is the net one year term insurance premium

$$FB_1 * A_{x:1} = $56.78$$

$$FB_1 = 100,000$$

$$A_{x:1} = .0005678$$

$$E^{CRVM} = (a) - (b) = 1,053.62 - 56.78 = 996.84$$

Using a valuation date of 12/31/08, m=8.

Cash Value ( $CV_m$ ) - Assuming an actual premium of \$1,689.15, actual interest credited at 3%, and current cost of insurance rates,  $CV_m$  = \$1,376.62.

Net Surrender Value = 719.62

Ratio (r) - CVm / GMFm

$$GMF_{m} = 1,068.45$$

$$r = 1,376.62/1,068.45 > 1$$
, therefore  $r = 1.00$ 

Present Value of Future Benefits (PVFBm) -

 $PVFB_8 = 21,441.12$ 

Net Level Premium Reserves (NLR<sub>m</sub>) -

- ((A) (B)) \* r
- (A) is  $PVFB_8 = 21,441.12$
- (B) is PVNLP = NLP \*  $a_{x+m}$

where NLP = PVFB<sub>I</sub> /  $a_X$ = 20,801.85/20.69 = 1,005.44

 $a_{X+m} = 20.22$ 

PVNLP = 1,005.44 \* 20.22 = 20,328.72

NLRm = (21,441.12 - 20,328.72) \* 1.00 = 1,112.40

 $\underline{\text{CRVM Reserve}}$  (CRVM<sub>m</sub>) -

 $CRVM_m = NLR_m - (E^{CRVM} * a_{X+m} * r)$  = 1,112.40 - 996.84 \* 20.22/20.69 \* 1.00 = 138.24

AG38 Reserve  $(tTV_{[x]} \text{ from Attachment}) = 2,281.46$ 

 $\underline{\text{Statutory Reserve}} \ = \ \text{MAX} \ (\text{CSV}_{\text{m}}, \text{CRVM}_{\text{m}}, \ \text{tTV}_{[x]}) \ = \ \text{MAX} \ (719.62, 138.24, \ 2, 281.46) \ = \ 2, 281.46$ 

## Male Age 35 NonSmoker Guaranteed Interest = 3% Guaranteed COI = 2001 CSO Male NonSmoker Specified Amount = \$100,000 (includes Policy Value)

Form FL-08(S)

GMP = \$1,689.15

<u>Duration</u>	GMF	FB		Duration	GMF	FB
1	882	100,000		44	68,724	100,000
2	1,785	100,000		45	70,319	100,000
3	2,712	100,000		46	71,859	100,000
4	3,659	100,000		47	73,333	100,000
5	4,628	100,000		48	74,750	100,000
. 6	5,618	100,000		49	74,730 76,111	100,000
7	6,629	100,000		50	77,413	100,000
8	7,657	100,000		51	78,648	100,000
9	8,702	100,000		52	79,808	100,000
10	9,763	100,000		53	80,890	100,000
11	11,215	100,000		54	81,890	100,000
12	12,695	100,000		55	82,811	100,000
13 ·	14,202	100,000		56	83,653	100,000
14	15,747	100,000		57	84,443	100,000
15	17,330	100,000		58	85,186	100,000
16	18,946	100,000		59	85,879	100,000
17	20,594	100,000		60	86,521	100,000
18	22,268	100,000		61	87,108	100,000
19	23,969	100,000		62	87,667	100,000
20	25,690	100,000		63	88,198	100,000
21	27,424	100,000		64	88,693	100,000
22	29,174	100,000		65	89,146	100,000
23	30,939	100,000		66	89,543	100,000
24	32,730	100,000		67	89,931	100,000
25	34,542	100,000		68	90,309	100,000
26	36,370	100,000		69	90,676	100,000
27	38,207	100,000	•	70	91,032	100,000
28	40,043	100,000		71	91,379	100,000
29	41,875	100,000		72	91,715	100,000
30	43,701	100,000		73	92,041	100,000
31	45,524	100,000		74	92,357	100,000
32	47,349	100,000		75	92,663	100,000
33	49,178	100,000		76	92,958	100,000
34	51,013	100,000		77	93,243	100,000
35	52,858	100,000		78	93,519	100,000
36	54,702	100,000		79	93,786	100,000
37	56,542	100,000		80	94,048	100,000
38	58,354	100,000		81	94,310	100,000
39	60,142	100,000		82	94,590	100,000
40	61,910	100,000		83	94,934	100,000
41	63,656	100,000		84	95,474	100,000
42	65,380	100,000		85	96,760	100,000
43	67,074	100,000		86	100,000	100,000
•						

#### Description

Actuarial Guideline XXXVIII describes a nine step process to calculate the reserves on a universal life policy that guarantees the coverage to remain in force as long as the accumulation of premiums paid satisfy the secondary guarantee requirement.

The first step requires a calculation of the minimum premiums that will satisfy the secondary guarantee requirement. The second step states that the specified premiums used for basic and deficiency reserve calculation be the minimum gross premiums derived in the first step. Basic and deficiency reserves are then calculated as instructed in the Valuation of Life Insurance Policies Model Regulation. Additionally, for purposes of applying Sections 7B and 7C of the Model, a lapse rate as described in AGXXXVIII may be used.

Step three states that a determination should be made of the amount of actual premium payments in excess of the minimum gross premiums, which is the amount of the shadow account. Step four requires a determination of the minimum amount of the shadow account required to fully fund the guarantee. The amount determined above for this step is to then be divided by one minus a seven percent premium load allowance (0.93). A funding ratio is then calculated by dividing the amount calculated in step 3 by the amount calculated in step 4, with the resulting ratio capped at 1.

In step five the net single premium on the valuation date is computed, using any valuation table and select factors authorized in section 5A of the Valuation of Life Insurance Policies Model Regulation. A lapse rate subject to the same criteria as in step 2 above may be used. The net single premium is calculated for the coverage provided by the secondary guarantee for the remainder of the secondary guarantee period. Step six determines the "net amount of additional premiums" by multiplying the funding ratio from step four by the difference between the net single premium in step five and the basic and deficiency reserves calculated in step two.

Step seven calculates a "reduced deficiency reserve" by multiplying the deficiency reserve by one minus the funding ratio calculated in step 4, but not less than zero. Step eight calculates the actual reserve to be used as the lesser of: (1) the net single premium from step five, (2) the amount of excess from step six plus the basic and deficiency reserves calculated in step two. This amount is reduced by any applicable surrender charges. If the resulting amount is less than the sum of the basic and deficiency reserve from step two, then the basic and deficiency reserves to be used are those calculated in step two. Step nine determines an "increased basic reserve" by subtracting the "reduced deficiency reserve" in step seven from the reserve calculated in step eight.

#### **Definitions and Notation**

Secondary Guarantee Period (n) – the period for which policyholder can maintain the policy in force due to the provisions of the secondary guarantee.

Minimum Gross Premium (GP) – the minimum premium to keep the secondary guarantee in force. This amount is calculated as the minimum premium that can be paid at the beginning of the policy year to keep the guarantee in force at the end of the year.

<u>Present Value of Future Benefits (PVFB)</u> – Value of future benefits discounted for interest and mortality and lapses. For Basic Reserves, PVFB is determined using an interest rate of 4% and Basic mortality. For Minimum reserves, PVFB is determined using an interest rate of 4% and Minimum Mortality. The maximum lapses allowed are used in the present value calculation.

Present Value of Future Premiums (PVNP) — Value of future net premiums discounted for interest and survivorship (including lapses). For Basic reserves, PVNP is determined using the net premiums for each segment, 4% interest, and Basic Mortality. For Minimum Reserves, PVNP is determined using the lower of the secondary guarantee specified premium and the net premium for each segment, 4% interest, and Minimum Mortality. Net Premium equals GP times the K factor for the segment. The maximum lapses allowed are used.

<u>CRVM Expense Allowance (E<sup>CRVM</sup>)</u> – Excess of net level annual premium issued one year older over the one-year term premium.

Basic Mortality - is defined as 2001 CSO Preferred Class Structure Male/Female Select and Ultimate Mortality. Select factors may only be applied during the first segment.

Minimum Mortality - is defined as 2001 CSO Preferred Class Structure Male/Female S & U Mortality and company-developed X-factors. Select factors and X-factors may only be applied during the first segment.

Terminal Reserve ( $[V_{[x]}]$ ) - present value of all future guaranteed death benefits (PVFB) minus the present value of all future net premiums (PVNP). For basic reserves this value is calculated using valuation interest and basic mortality. For minimum reserves this value is calculated using minimum interest and minimum mortality. The maximum lapses allowed are used in the present value calculations.

Deficiency Reserve  $(\underline{DV_{(x)}})$  – A policy is deficient if the gross specified premium is less than the net premium. Any duration where this is true, the gross premium must be substituted for the net premium in the minimum reserve calculation. Any excess of minimum reserve over the basic reserve must be held as a deficiency reserve.

Mean Basic Reserve  $(MV_{[x]})$  — Mean reserve in year t is equal to the weighted average of the initial and terminal reserve for year t. Initial reserve is the prior year terminal reserve plus the net premium.

Excess (EX) – The amount in the shadow account. This will be equal to the sum of any paid premiums minus the shadow account charges accumulated with interest.

Single Pay Excess (SP) - The amount in the shadow account necessary to fully fund the secondary guarantee at the valuation date.

Net Single Premium (NSP) — The net single premium on the valuation date for the coverage provided by the secondary guarantee for the remainder of the secondary guarantee period using basic mortality. The maximum lapses allowed are used in the NSP calculation.

Total AG38 Reserve  $(tTV_{[x]})$  = The total reserve held, which is the lesser of: (1) the net single premium from step five, (2) the amount of excess from step six plus the basic and deficiency reserves calculated in step two. This amount is reduced by any applicable surrender charges. If the resulting amount is less than the sum of the basic and deficiency reserve from step two, then the basic and deficiency reserves to be used are those calculated in step two.

<u>Surrender Charge (SC)</u> = The policy surrender charge applicable to the base policy's account value.

#### **Formulas**

PVGP<sup>seg</sup> = Present value of gross premiums during segment as of beginning of a segment

$$= \sum_{t=1 \text{ to } j} GP_{[x]+k+t-1} * v^{t-1} * _{t-1}p_{[x]+k}$$

PVFB<sup>seg</sup> = Present value of death benefits during segment as of beginning of a segment

$$= \Sigma_{t=1 \text{ to } j} \operatorname{Face}_{t+k} * \mathbf{v}^t * q_{[x]+k+t-1} * {}_{t-1} p_{[x]+k}$$

$$E^{CRVM} = \frac{\sum_{t=2 \text{ to } j} Face_t * v^t * q_{[x]+t-1} *_{t-1} p_{[x]} * GP_{[x]} - Face_1 * v * q_{[x]} * i / ln(1+i)}{\sum_{t=2 \text{ to } j} GP_{[x]+t-1} * v^{t-1} *_{t-1} p_{[x]}}$$

$$K = (PVFB^{seg} + E^{CRVM}) / PVGP^{seg}$$

PVNP = Present value of net premiums

$$= \Sigma_{t=1 \ to \ j} \ K_{k+t+r} * GP_{[x]+k+t-1} * \ v^{t-1} * _{t-1} p_{[x]+k:}$$

$$_{t}V_{[x]+k} = PVFB(t) - PVNP(t)$$

$$= \qquad \qquad \Sigma_{r=1 \text{ to } n-k-t} \text{ Face}_{k+t+r} * v^{r} * \underset{r-1}{*} p_{[x] + k+t} * q_{[x] + k+t+r-1} - K_{k+t+r} * GP_{[x] + k+t+r-1} * v^{r-1} * \underset{r-1}{*} p_{[x] + k+t}$$

where:

 $p_{[x]}$  includes applicable mortality and lapses

x = issue age of insured

n = secondary guarantee period

j = length of current segment

k = number of years from issue to beginning of segment

t = number of years from beginning of current segment

v = 1 / (1+i)

i = valuation interest rate

 $Face_{k+t} = Death Benefit in year k+t$ 

#### Sample Calculation

Insured:

Male, Age 35, Nonsmoker

Specified Amount:

\$100,000

Target Premium:

\$730

Issue Date

05/01/2008

Valuation Date:

12/31/2008

#### **Basic Reserve**

#### I = 4.0% for basic

Since the gross premiums increase at a rate less than the increase of the mortality, there is only one segment of length 86 years.

n = 86 years

 $\mathbf{k} = \mathbf{0}$ 

PVFB = Present Value of future benefits at the start of the segment

= 20,831.50

PVGP = Present value of gross premiums at the start of the segment

= 18,783.34

 $E^{CRVM} = PVFB(t+1)/PVGP(t+1) * GP - Face * (1/(1+I)) * q_{[55]} * i / ln(1+i)$ 

= 21,618.15 / 19,430.50 \* 111.00 - 100,000 \* (1/(1+.04)) \* .00058 \* .04 / ln(1.04)

= 66.62 in year 1 only

K = (20,831.50 + 66.62)/18,783.34

= 1.1126

NP = Net Premium =  $GP * K - E^{CRVM}$ 

= 111.00\*1.1126 - 66.62 = 56.88 in year 1

 $_{1}V_{[55]} = PVDB(1) - PVNP(1)$ 

= 20,898.12 - 20,898.12 = 0

 $_{1}MV_{[55]} = \underline{(12-m)} * (_{0}V_{[55]} + NP_{1}) + \underline{m} * _{1}V_{[55]}$ 

12

Since Valuation date is 8 months past issue date m = 8.

= .33 \* (0 + 56.88) + .67\*0

#### Minimum Reserve

I = 4% for minimum reserves

Since the gross premiums increase at a rate less than the increase of the mortality, there is only one segment of length 86 years.

$$= 86 \text{ years}$$

$$\mathbf{k} = \mathbf{0}$$

$$= 16,176.70$$

$$=26,285.59$$

$$E^{CRVM} = PVDB(t+1)/PVGP(t+1) * GP - Face * (1/(1+I)) * q_{[55]} * i / ln(1+i)$$

$$= 16,798.57 / 27,229.63*111.00 - 100,000*(1/(1+.04))*.0002958*.04 / ln(1.04)$$

$$= 39.47$$
 in year 1 only

$$K = (16,176.70 + 39.47)/26,285.59$$

$$= .6169$$

NP = Net Premium = 
$$GP * K - E^{CRVM}$$

= 
$$111.00*.6169 - 39.47 = 29.01$$
 in year 1

$$_{1}V_{[55]}$$
: = PVDB(1) - PVNP(1)

$$= 16,216.17 - 16,216.17 = 0$$

$$= (12-m) * (_{0}V_{[55]} + NP_{1}) + m * _{1}V_{[55]}$$

$$= (12-m) * (_{0}V_{[55]} + NP_{1}) + m * _{1}V_{[55]}$$

Since Valuation date is 8 months past issue date m = 8.

$$= .33 * (0 + 29.01) + .67 * 0$$

#### **Deficiency Reserve**

$$_{t}DV_{[55]} = MAX(0, 9.67 - 18.96)$$

#### =0

#### **Actuarial Guideline XXXVIII Reserve**

$$EX = 1,603.12$$

$$SP = 10,662.34$$

$$SC = 657.00$$

Funding ratio = EX/(SP/0.93) = 1,603.12 / (10,662.34/0.93) = .1398

NSP = 20,898.12

$$_{t}DV_{[55]} = 0 * (1 - Funding ratio) = 0 * (1 - .1398) = 0$$

 $_1TV_{[55]} = MAX(_1MV_{[55]} + _1DV_{[55]}, MIN(NSP, _1MV_{[55]} + _1DV_{[55]} + [Funding ratio* (NSP - _1MV_{[55]} - _1DV_{[55]} - ] - SC)) = MAX(18.96 + 0, MIN[20,898.12 , 18.96 + .1398* (20,898.12 - 18.96 - 0) - 657.00])$ 

= MAX(18.96, MIN(20,898.12, 2,281.46)) = 2,281.46

This reserve would then be compared to the cash surrender value and the CRVM UL model regulation reserve to determine the final statutory reserve. The final reserve held would be equal to the maximum of the cash surrender value, the CRVM reserve, and the Actuarial Guideline XXXVIII reserve calculated above.

#### PENN MUTUAL LIFE INSURANCE COMPANY

## ACTUARIAL BASIS, CASH VALUE FORMULA DEMONSTRATION OF COMPLIANCE WITH STANDARD NONFORFEITURE LAW DEMONSTRATION OF COMPLIANCE WITH STANDARD VALUATION LAW

#### FLEXIBLE PREMIUM ADJUSTABLE LIFE, FORM FL-08(U)

#### I. DESCRIPTION OF POLICY CHARACTERISTICS

This policy provides adjustable life insurance coverage while the policy remains in force.

#### A. Death Benefits

Insurance on the life of the insured is integrated with the policy value under one of two options.

Under option one, the total death benefit is the Specified Amount on the date of death.

Under option two, the death benefit is defined as the Specified Amount on the date of death plus the policy value on the date of death.

Under either option, should the amount of a defined percentage of the policy value be greater than the death benefit on the date of death, the death benefit will be adjusted automatically to keep the death benefit equal to the defined percentage of the policy value. The defined percentage is that percentage which will continue to qualify the policy as life insurance under Section 7702 of the 1986 Internal Revenue Code. Note that this policy form can qualify for life insurance under either the Guideline Premium Test or the Cash Value Accumulation Test.

#### B. Policy Value

The policy value is the accumulation of interest of a percentage of the net premiums less expense charges and less the cost of insurance based on the net amount of risk.

#### C. <u>Cash Surrender Value</u>

The cash surrender value is the policy value less the surrender charge. A policy is subject to a surrender charge on the initial Specified Amount only during the first fourteen years in force and for fourteen years following an increase in the Specified Amount.

#### D. <u>Continuation of Insurance</u>

If the policyholder ceases paying premiums, the policy will continue in force for as long as the net cash surrender value is sufficient to keep it in force or the No Lapse Guarantee requirement is satisfied. The rates for calculating the Monthly Deductions will be the same as those used while on a premium paying basis.

#### E. No Lapse Guarantee

The policy will not lapse as a result of a Net Cash Surrender Value insufficient to cover the Monthly Deduction for the following month if, on a monthly anniversary prior to the Maturity Date, the No-Lapse Guarantee Requirement is satisfied. The No-Lapse Guarantee Requirement is satisfied if, on a monthly anniversary prior to the Maturity Date, the No-Lapse Guarantee Account less any outstanding indebtedness exceeds zero.

However, failure to satisfy this Requirement does not necessarily lapse the contract, provided the Net Cash Surrender Value is greater than zero.

#### F. Flexibility

At issue the owner selects both a premium amount and the amount of insurance, subject to the minimum amounts. At any time after the first policy year, while the policy is in force, the owner may change the amount of insurance. Decreases may not lower the amount of insurance below the minimum amount. Increases are subject to the rules of Penn Mutual as to age and amount. Evidence of insurability is required for any increase in the amount of insurance. Premiums after the first may be paid in any amount and at any interval subject to the following conditions:

- (1) No premium payment may be less than \$25 or such lower amount that may be established by Penn Mutual.
- (2) Penn Mutual reserves the right to limit total premiums paid in any policy year to the planned payments for that policy year as shown on Page 3 of the Policy.
- (3) If the Guideline Premium Test is used to qualify the policy as life insurance, total premiums paid in any year may not exceed the guideline premium limitation as set forth in Section 7702 of the Internal Revenue Code of 1986.

#### II. BASIS OF VALUES

#### A. Interest

The minimum interest rate that will be used in calculating the Policy Value is .24663% per month compounded monthly. This is equivalent to 3% per year compounded annually. The actual interest that will be credited to the Policy Value will be at rates set by Penn Mutual that could be higher than 3%.

Because of the retrospective approach used for the calculation of policy values, the use of an increased rate of interest in determining policy values would produce increased cash surrender values. Therefore, such use is not in conflict with the maximum interest rate defined in the Standard Nonforfeiture law.

#### B. Cost of Insurance

The guaranteed maximum cost of insurance rates applied in the calculation of policy values under this policy are the 2001 CSO (80) Smoker and Nonsmoker Mortality Table, Age Nearest Birthday.

The company may use modified cost of insurance rates which produce a lower cost of insurance, thus producing higher cash surrender values than those generated by the guaranteed maximum rates.

#### C. Expense Charges

The maximum expense charges applicable under this policy are:

- (a) a percent of premium charge of 15% of each premium paid;
- (b) a monthly expense charge of \$9.00;
- (c) a monthly expense charge per \$1,000 of original Specified Amount that varies by issue age for the first 120 months following the date of issue; and
- (d) if the Specified Amount has been increased within the past year, a monthly expense charge per \$1,000 of the increased Specified Amount that varies by the age at the time of increase for the first 120 months following the date of increase.
- D. The same basis of values applies whether premiums are being paid or the policyholder has ceased to pay premiums.

### III. POLICY VALUE FORMULA AND COMPARISON OF FLEXIBLE PREMIUM ADJUSTABLE LIFE CASH SURRENDER VALUES WITH MINIMUM NONFORFEITURE REQUIREMENTS

For Flexible Premium Adjustable Life (FPAL) the ultimate plan of insurance is determined by assuming that the initial premium and death benefit continue unchanged. Since FPAL is a universal life type policy, the initial premium and initial death benefit are those selected by the policyowner at issue, and hence are known.

The Standard Nonforfeiture Law (SNFL) defines minimum policy values using a prospective formula. But the prospective SNFL formula can be mathematically converted to a retrospective form. The method of calculating FPAL policy values was designed to be consistent with the retrospective equivalent of the SNFL cash value formula.

The following section will demonstrate that FPAL cash surrender values are greater than minimum cash values required by the retrospective version of the SNFL formula using the following approach:

- (1) It will be shown that the FPAL policy value formula is consistent with the retrospective equivalent of the formula required by the SNFL.
- (2) Minimum FPAL policy values will be generated by using the minimum interest rate of 3% and maximum cost of insurance rates in the policy value formula. Minimum FPAL cash surrender values are obtained by subtracting the maximum surrender charge from the policy values.

Excess interest and/or lower cost of insurance rates will result in policy values greater than those based on guaranteed cost of insurance and the 3% minimum interest rate.

- (3) It will be shown that the maximum surrender charge for FPAL will, at all times, be less than or equal to the maximum expense allowance permitted by the SNFL.
- (4) The combination of items (1), (2) and (3) above ensures that regardless of the incidence and amount of FPAL premium payments and benefit changes, FPAL cash surrender values will be greater than the minimum SNFL cash values generated by the retrospective equivalent of the SNFL formula.

The following is a definition of terms used in the policy value formulas:

- t = duration from original issue date measured in months.
- i' = monthly interest rate equal to 3% annually, which equals  $(1.03)^{1/12}$  1
- $tq_X$  = 1/12 of the appropriate 2001 CSO mortality rate for age x where x is the "age nearest birthday" as of the policy anniversary prior to month t.
- $F_t$  = total death benefit in month t.
- E = Monthly expense charge which equals \$9.00 per policy while the policy remains in force.
- excess of the first-year monthly charge per \$1,000 of original Specified Amount over the average (over 19 years) renewal monthly charge per \$1,000 of original Specified Amount. The monthly charge per \$1,000 of original Specified Amount varies by issue age and extends for the first 120 months following the date of issue or the date of an increase.
- Gross premium collected in month t. All premiums are assumed to be paid monthly at the beginning of each month.
- $P_t$  = Net premium credited to policy values, which equals 85% of  $G_t$ .

 $t^{T}x$  = Maximum monthly cost of insurance rate which equals  $_{1}q_{x}/(1-_{1}q_{x})$  where x is the "age nearest birthday" as of the policy anniversary prior to month t.

 $C_t$  = Maximum monthly cost of insurance for month t.

 $t^{CV}$  = Policy value at end of month t.

tSC = Surrender Charge at end of month t.

tCSV = Cash Surrender Value at end of month t.

The FPAL policy value at time of issue (after receipt of the initial premium) is P. The FPAL policy value at the end of the first month just prior to the payment of the second month's premium is:

(1) 
$${}_{1}CV = (P_{1} - E - EC - C_{1}) * (1 + i')$$

where:

(2) 
$$C_1 = {}_1r_x * [\underline{F_1} - P_1] = {}_1q_x * [\underline{F_1} - P_1]$$
  
 $(1+i')$   $1 - {}_1q_x (1+i')$ 

Substituting (2) into (1), we have:

(3) 
$$_{1}CV = [P_{1} - E - EC - \underline{q_{x}} * (\underline{F_{1}} - P_{1})] * (1 + i')$$

$$= (P_1 - E - EC) * (1 + i') * (1 - 1q_x) - 1q_x * F_1 + 1q_x * P_1 * (1 + i')$$

$$1 - 1q_x$$

Collecting terms:

(4) 
$${}_{1}CV = (P_{1})^{*} (1 + i') - {}_{1}q_{x} * F_{1} - (E + EC) * (1+i')$$
  
 $(1 - {}_{1}q_{x})$ 

and the cash surrender value, 1CSV, is given by:

(5) 
$${}_{1}CSV = (P_{1})^{*} (1 + i') - {}_{1}q_{x} * F_{1} - (E + EC) * (1+i') - {}_{1}SC$$
  
(1 -  ${}_{1}q_{x}$ )

Next it is necessary to show that the FPAL cash surrender value formula is consistent with the SNFL formula for calculating minimum cash values.

The first year minimum cash value required by the SNFL is calculated using a prospective formula involving the present value of future benefits less the present value of future adjusted net premiums. This prospective form can be converted into the following retrospective form by using the technique described on page 106 of Life Contingencies by C.W. Jordan.

The notation used for the SNFL minimum cash value formulas is as follows:

i = .03

 $q_{x+t}$  = the appropriate 2001 CSO mortality rate where age x+t is the "age nearest birthday" as of the t'th policy anniversary.

 $P_t^A = adjusted premium in year t.$ 

 $A_0$  = present value of future benefits at time of issue.

PV(P<sup>A</sup><sub>t</sub>)<sub>0</sub> = present value of future adjusted premiums at time of issue.

 $E^1$  = maximum first year expense allowance.

<sub>t</sub>F = death benefit in year t.

 $_{t}CV^{M}$  = SNFL minimum cash value at end of year t.

The retrospective formula for calculating the minimum cash value as defined by the SNFL, at the end of the first year, is:

$$_{1}CV^{M} + q_{x} (_{1}F - _{1}CV^{M}) = (_{0}CV^{M} + P_{1}^{A}) (1 + i)$$

(6) 
$${}_{1}CV^{M} = \underline{({}_{0}CV^{M} + P^{A}{}_{1})(1+i) - q_{x} * {}_{1}F}$$

where:

$$_{0}CV^{M} = A_{0} - PV (P^{A}_{t})_{0}$$

 $PV(P^A_1)_0$  is the present value of future net adjusted premiums which is also equal to  $A_0 + E^1$ . Using this value of  $PV(P^A_1)_0$ ,  $CV^M_0 = A_0 - (A_0 + E^1) = -E^1$ .

Substituting - E<sup>1</sup> for CV<sub>0</sub> in (6), we have:

(7) 
$${}_{1}CV^{M} = \underline{(P^{A}_{1} - E^{1})(1 + i) - q_{x} * F_{1}}$$

$$= (P^{A}_{1}) * (1+i) - q_{x} * F_{1} - E^{1} * (1+i)$$

$$1 - q_{x} (1 - q_{x})$$

Formula (5) is shown for comparison of FPAL cash value to SNFL minimum:

(5) 
$${}_{1}CV = \underline{[P_{\underline{1}}] (1+i') - \underline{1}q_{\underline{x}} * F_{\underline{1}}} - (E + EC) * (1+i') - {}_{1}SC$$

These two formulas are identical with the following exceptions:

(a) Formula (5) develops policy values (and, therefore, cash surrender values) on a monthly basis while formula (7) is an annual calculation. The terms for interest and mortality in formula (5) are the monthly equivalents of the like terms in formula (7) based on the following assumptions:

$$(1+i')^{12} = (1+i)$$
 (compound interest)  
 $_1q_x = (1/12) * q_x$  (uniform distribution of deaths)

- (b) The monthly expense charge, E, in formula (5) does not appear in formula (7) because it is a level expense charge. Level expense charges are not subject to the first year expense allowance limit and do not appear in the formula for minimum cash values under SNFL.
- (c) The term EC in formula (5) is analogous to E<sup>1</sup> in formula (7). It will be demonstrated that the value of EC plus the surrender charge can never exceed the minimum expense allowance under SNFL. This is a necessary condition to substantiate that the FPAL policy value and corresponding cash value formulas satisfy minimum requirements.

For renewal periods after the first year, the same consistency as demonstrated above exists. Consider the t+1st month policy value where  $t \ge 12$ , just prior to the payment of the monthly premium  $P_{t+2}$ , which is due on the t+1st month anniversary day. The FPAL formula is:

(7) 
$${}_{t+1}CV = ({}_{t}CV + P_{t+1}) (1+i') - (1+i') C_{t+1} - E (1+i')$$

where:

(8) 
$$C_{t+1} = {}_{t+1}r_x \underbrace{[F_{t+1} - ({}_tCV + P_{t+1})]}_{1 + i'} = \underbrace{{}_{t+1}q_x \underbrace{[F_{t+1} - ({}_tCV + P_{t+1})]}_{1 - {}_{t+1}q_x} - ({}_tCV + P_{t+1})]$$

Substituting (8) in (7), we have:

(9) 
$${}_{t+1}CV = ({}_{t}CV + P_{t+1} - E)(1 + i') - (1 + i') * \underline{{}_{t+1}q_x} [F_{t+1} - ({}_{t}CV + P_{t+1})]$$

$$(1 - {}_{t+1}q_x)1 + i'$$

(10) 
$$t+1CV = \underbrace{(tCV + P_{t+1} - E)(1 + i') - t+1}_{t+1}q_x * F_{t+1} + E * (1 + i')*(t+1)q_x$$

$$1 - t+1q_x$$

Using the retrospective method of calculating the SNFL minimum policy value for duration t+1, we have:

(11) 
$$_{t+1}CV^{M} = \underbrace{(_{t}CV^{M} + P^{A}_{t+1})(1+i) - q_{x+1} *}_{1 - q_{x+t}}$$

The SNFL formula (11) is the same as the FPAL formula (10) except for the monthly versus annual time period, and except for the expense charge term, which is a level expense charge and does not appear in the formula for minimum cash values under SNFL.

Upon surrender of the Flexible Premium Adjustable Life Policy, a surrender charge is applied against the policy value. The surrender charge is determined by multiplying (d) times 90% of the lesser of (a), (b), and (c) where:

- (a) total premium paid in first 12 months after policy issue;
- (b) the Maximum Surrender Charge Premium;
- (c) \$25.00 per thousand of Specified Amount:
- (d) a factor based on policy year as follows:

Policy Year	<u>Factor</u>
1	1.00
2	.90
3	.83
4	.76
5	.69
6	.62
7 .	.55
8	.48
9	.41
10	.34
11	.27
12	.20
13	.13
14	.06
15+	0

Given we calculated the Flexible Premium Adjustable Life policy values using the minimum interest rate of 3% and the maximum monthly cost of insurance rates, the cash surrender values will be greater than the minimum policy values required by the SNFL, provided that the surrender charge can never be greater than the unamortized and unused portion of the maximum first year expense allowance under the SNFL.

The formula for the SNFL maximum allowance is:

$$E = (1.25 * H) + 10$$

where H is the minimum value of P or 40. [P is the Net Level Annual Premium].

Table 2 summarizes the maximum SNFL first year expense allowance age-by-age for comparison versus the maximum surrender charge. The nonforfeiture interest rate used is the maximum rate allowed by law (5%). Using a rate in excess of the policy's guarantee rate produces a smaller SNFL maximum first year expense allowance which is conservative when demonstrating compliance with SNFL.

As shown in Table 2, for each age, the maximum surrender charge plus the first year expense charge is less than the SNFL maximum first year expense allowance.

Table 3 shows, for various issue ages, the run off of the unamortized first year expense allowance versus the surrender charge. Note that in the ten years after issue and in the ten years following an increase, there is an annualized expense charge per \$1,000 of Specified Amount that varies by issue age or the age at the time of increase. The unamortized expense allowance reflects this charge. Table 4 contains the Maximum Surrender Charge Premiums and Table 5 contains the monthly expense charges per \$1,000 of Specified Amount.

A comment should be made about the consistency between the adjusted premiums (PA) in the SNFL formulas and the net premiums less level expense charge (P-E) in the FPAL policy value formulas. The present value of adjusted premiums is equal to the present value of future benefits plus the first year expense allowance (E¹) at time of issue in the SNFL formula. Likewise, the present value of net premiums less level expense charge (P-E) (where P equals 85% of gross premiums and E equals \$9.00) is equal to the present value of future benefits, using the minimum 3% interest rate and maximum cost of insurance rates, which are based on the appropriate 2001 CSO mortality table. Effectively, the SNFL formula and the FPAL cash policy value formula amortize the first year expense charges over the premium paying period of the policy, and the first year expense allowance in the SNFL formula is greater than the policy surrender charge in the FPAL policy value formula. Thus the FPAL cash surrender value must be greater than the minimum SNFL value by the unamortized portion of the excess first year expenses.

The method of calculating policy values is described in the policy form and annually the Company will furnish the insured a statement showing the current policy values.

### IV. VALUATION BASIS

The Standard Valuation Law requires minimum reserves to be computed under the Commissioner's Reserve Valuation Method (CRVM). The statutory reserve of this policy will be calculated as the greater of the following: the CRVM method; the reserve for the no-lapse guarantee; or the cash surrender value (see attached Statutory Reserves memo).

Andrew W. Martin, F.S.A., M.A.A.A.

Associate Actuary

₊Issue ' Age	Unisex PPNT	Unisex PNT	Unisex NT	Unisex PT	Unisex T
	· · · · · · · · · · · · · · · · · · ·	<del> </del>	<del></del>	T	<del></del>
0	0.00087	0.00087	0.00087	0.00087	0.00087
1	0.00052	0.00052	0.00052	0.00052	0.00052
2	0.00036	0.00036	0.00036	0.00036	0.00036
3	0.00026	0.00026	0.00026	0.00026	0.00026
4	0.00021	0.00021	0.00021	0.00021	0.00021
5	0.00020	0.00020	0.00020	0.00020	0.00020
6	0.00021	0.00021	0.00021	0.00021	0.00021
7	0.00022	0.00022	0.00022	0.00022	0.00022
8	0.00022	0.00022	0.00022	0.00022	0.00022
9	0.00023	0.00023	0.00023	0.00023	0.00023
10	0.00023	0.00023	0.00023	0.00023	0.00023
11	0.00026	0.00026	0.00026	0.00026	0.00026
12	0.00032	0.00032	0.00032	0.00032	0.00032
13	0.00037	0.00037	0.00037	0.00037	0.00037
14	0.00044	0.00044	0.00044	0.00044	0.00044
15	0.00056	0.00056	0.00056	0.00056	0.00056
16	0.00067	0.00067	0.00067	0.00067	ì
17	0.00078	0.00087	f.	į.	0.00067
1			0.00078	0.00078	0.00078
18	0.00084	0.00084	0.00084	0.00084	0.00084
19	0.00088	0.00088	0.00088	0.00088	0.00088
20	0.00085	0.00085	0.00085	0.00113	0.00113
21	0.00085	0.00085	0.00085	0.00119	0.00119
22	0.00086	0.00086	0.00086	0.00125	0.00125
23	0.00086	0.00086	0.00086	0.00130	0.00130
24	0.00088	0.00088	0.00088	0.00138	0.00138
25	0.00088	0.00088	0.00088	0.00146	0.00146
26	0.00092	0.00092	0.00092	0.00153	0.00153
27	0.00097	0.00097	0.00097	0.00162	0.00162
28	0.00096	0.00096	\ 0.00096	0.00164	0.00164
29	0.00095	0.00095	0.00095	0.00165	0.00165
30	0.00094	0.00094	0.00094	0.00165	0.00165
31	0.00094	0.00094	0.00094	0.00167	0.00167
32	0.00095	0.00095	0.00095	0.00169	0.00169
33	0.00098	0.00098	0.00098	0.00175	0.00175
34	0.00101	0.00101	0.00101	0.00173	0.00173
35	0.00105	0.00101	0.00101	0.00191	0.00191
36	0.00111	0.00103	0.00103	0.00202	0.00202
37	0.00117	0.00117			
38	0.00117	0.00117	0.00117	0.00214	0.00214
39	0.00123		0.00125	0.00230	0.00230
40	1	0.00132	0.00132	0.00246	0.00246
1	0.00141	0.00141	0.00141	0.00264	0.00264
41	0.00152	0.00152	0.00152	0.00288	0.00288
	0.00165	0.00165	0.00165	0.00315	0.00315
43	0.00181	0.00181	0.00181	0.00348	0.00348
44	0.00199	0.00199	0.00199	0.00387	0.00387
45	0.00221	0.00221	0.00221	0.00428	0.00428
46	0.00241	0.00241	0.00241	0.00468	0.00468
47	0.00265	0.00265	0.00265	0.00513	0.00513
48	0.00280	0.00280	0.00280	0.00543	0.00543
49	0.00298	0.00298	0.00298	0.00578	0.00578
50	0.00322	0.00322	0.00322	0.00624	0.00624
51	0.00350	0.00350	0.00350	0.00677	0.00677
52	0.00386	0.00386	0.00386	0.00747	0.00747
53	0.00426	0.00426	0.00426	0.00826	0.00826
54	0.00475	0.00475	0.00475	0.00921	0.00921
55	0.00534	0.00534	0.00534	0.01027	0.01027
56	0.00595	0.00595	0.00595	0.01027	0.01027
57	0.00660	0.00660	0.00660	0.01136	0.01136
58	0.00000	0.00000	0.00660		
59				0.01347	0.01347
	0.00785	0.00785	0.00785	0.01456	0.01456
60	0.00862	0.00862	0.00862	0.01584	0.01584

### 2001 CSO

۱,	Issue	Unisex	Unisex	Unisex	Unisex	Unisex
?	Age	PPNT	PNT	NT	PT	Т
١	61	0.00955	0.00955	0.00955	0.01739	0.01739
١	62	0.01066	0.01066	0.01066	0.01922	0.01922
-	63	0.01190	0.01190	0.01190	0.02125	0.02125
1	64	0.01320	0.01320	0.01320	0.02331	0.02331
-	65	0.01459	0.01459	0.01459	0.02538	0.02538
-	66	0.01600	0.01600	0.01600	0.02740	0.02740
1	67	0.01746	0.01746	0.01746	0.02942	0.02740
4	68	0.01740	0.01740	1	i	1
	69	0.01903		0.01903	0.03156	0.03156
1	70	1	0.02067	0.02067	0.03371	0.03371
1		0.02262	0.02262	0.02262	0.03628	0.03628
.	71 ***	0.02482	0.02482	0.02482	0.03912	0.03912
1	72	0.02765	0.02765	0.02765	0.04283	0.04283
١	73	0.03064	0.03064	0.03064	0.04661	0.04661
1	74	0.03379	0.03379	0.03379	0.05048	0.05048
ı	75	0.03725	0.03725	0.03725	0.05487	0.05487
1	76	0.04101	0.04101	0.04101	0.05956	0.05956
1	77	0.04533	0.04533	0.04533	0.06491	0.06491
Į	78	0.05034	0.05034	0.05034	0.07102	0.07102
	. 79	0.05606	0.05606	0.05606	0.07789	0.07789
١	80	0.06228	0.06228	0.06228	0.08523	0.08523
١	81	0.06954	0.06954	0.06954	0.09378	0.09378
1	82	0.07717	0.07717	0.07717	0.10252	0.10252
1	83	0.08526	0.08526	0.08526	0.11153	0.11153
ı	84	0.09417	0.09417	0.09417	0.12129	0.12129
1	85	0.10410	0.10410	0.10410	0.13240	0.13240
1	86	0.11463	0.11463	0.11463	0.14393	0.14393
	87	0.12678	0.12678	0.12678	0.15715	0.15715
1	88	0.13964	0.13964	0.13964	0.17081	0.17081
ı	89	0.15310	0.15310	\ 0.15310	0.18471	0.18471
	90	0.16656	0.16656	0.16656	0.19796	0.19796
١	91	0.17734	0.17734	0.17734	0.20742	0.20742
ŀ	92	0.18976	0.18976	0.18976	0.21846	0.21846
	93	0.20425	0.20425	0.20425	0.23112	0.23112
	94	0.22080	0.22080	0.22080	0.24530	0.24530
ı	95	0.23992	0.23992	0.23992	0.26409	0.26409
	96	0.25798	0.25798	0.25798	0.28123	0.28123
l	97	0.27737	0.27737	0.27737	0.29938	0.29938
L	98	0.28786	0.28786	0.28786	0.30738	0.30738
	99	0.30277	0.30277	0.30277	0.31991	0.31991
	100	0.32195	0.32195	0.32195	0.33679	0.33679
l	101	0.34020	0.34020	0.34020	0.35244	0.35244
L	102	0.36093	0.36093	0.36093	0.37026	0.37026
	103	0.38445	0.38445	0.38445	0.39012	0.39012
	104	0.41108	0.41108	0.41108	0.41237	0.41237
	105	0.44070	0.44070	0.44070	0.44185	0.44185
	106	0.47212	0.47212	0.47212	0.47315	0.47315
	107	0.50524	0.50524	0.50524	0.50614	0.50614
	108	0.53948	0.53948	0.53948	0.54029	0.54029
	109	0.57574	0.57574	0.57574	0.57645	0.57645
	110	0.61350	0.61350	0.61350	0.61412	0.61412
	111	0.65088	0.65088	0.65088	0.65142	0.65142
	112	0.68811	0.68811	0.68811	0.68860	0.68860
	113	0.72351	0.72351	0.72351	0.72396	0.58860
	114	0.77052	0.77052	0.77052	- 1	0.72396
	115	1		1	0.77089	
		0.81587	0.81587	0.81587	0.81618	0.81618
Ì	116	0.86349	0.86349	0.86349	0.86375	0.86375
	117	0.91572	0.91572	0.91572	0.91592	0.91592
	118	0.96589	0.96589	0.96589	0.96603	0.96603
	119	1.00000	00000.1	1.00000	1.00000	1.00000
L.,	120	1.00000	1.00000	00000.1	1,00000	1.00000

Table 2

UNISEX	PREFERRED	PLUS	NONTOBACCO

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
			=15 o=		(2) + (3)		(4) + (5)	(1) - (6)
	ALCT LONG.	MAXIMUM	FIRST	AVERAGE	INITIAL			
100115	NET LEVEL	FIRST YEAR	YEAR	RENEWAL	ACQUIS	MAXIMUM		UNUSED
ISSUE	ANNUAL	EXPENSE	EXPENSE	EXPENSE	EXPENSE	SURRENDER	TOTAL	EXPENSE
AGE	PREMIUM	ALLOWANCE	CHARGE	CHARGE	CHARGE	CHARGE	CHARGES	ALLOWANCE
0	1.63	12.04	3,85	1.82	2.03	2,16	4.19	7.85
1	1.67	12.09	3.85	1.82	2,03	2.30	4.32	7.77
2	1.73	12.16	3.85	1,82	2.03	2.42	4.45	7.72
3	1.80	12.25	3.85	1.82	2.03	2.56	4.58	7.67
4	1.88	12.36	3.85	1.82	2.03	2.68	4.71	7.65
5	1.97	12.46	3.85	1.82	2.03	2.82	4.84	7.62
6	2.06	12.58	3.85	1.82	2,03	2.94	4.97	7.61
7	2.16	12.70	3.85	1.82	2.03	3.08	5.11	7.60
8	2.26	12.83	3.85	1.82	2.03	3.20	5.23	7.60
9	2.37	12.97	3.85	1.82	2.03	3.34	5.37	7.60
10	2.49	13.11	3.85	1.82	2.03	3.47	5.49	7.61
11	2.61	13.26	3.85	1.82	2.03	3.60	5,63	7.63
12	2.73	13,41	3.85	1.82	2.03	3.73	5.75	7.66
13	2.86	13.57	3.85	1.82	2.03	3.86	5.89	7.68
14 15	2.99	13.74	3.85	1.82	2.03	3.99	6.01	7.73
16	3.13 3.27	13,91 14.08	3.85	1.82	2.03	4.12	6.15	7.76
17	3.41	14.26	3,85 3,85	1.82	2.03	4.25	6,28	7.81
18	3.55	14.44	3.85	1.82 1.82	2.03	4.38	6.41	7.85
19	3.70	14.63	3.85	1.82	2.03 2.03	4.51 4.64	6.54 6.67	7.90 7.95
20	3.86	14.82	3.60	1.71	1.89	2.89	4.78	10.04
21	4.02	15.03	3.61	1.71	1.90	3.01	4.91	10.12
22	4.20	15.24	3.61	1.71	1.90	3.11	5.02	10.23
23	4.38	15.47	3.61	1.71	1.90	3.23	5.13	10.34
24	4.58	15.72	3.61	1.71	1.90	3,34	5.24	10.48
25	4.78	15.98	3.61	1.71	1.90	3.46	5.36	10.62
26	5.00	16.25	3.62	1.72	1.91	3.64	5.54	10.71
27	5.23	16.54	3.62	1.72	1.91	3.82	5.72	10.81
28	5.47	16.84	3.62	1.72	1.91	4.01	5.91	10.92
29	5.72	17.15	3,62	1.72	1.91	4.19	6.09	11.06
30	6.00	17.49	3.64	1.72	1.91	4.37	6.28	11,22
31	6.28	17.86	3.64	1.72	1.91	4.55	6.46	11.40
32	6.59	18.24	3.64	1.72	1.91	4.73	6.64	11.60
33	6.92	18.65	3.65	1.73	1.92	4.91	6.83	11.81
34	7.26	19,08	3.65	1.73	1.92	5.09	7.01	12.06
35	7.63	19.53	3.65	1.73	1.92	5.27	7.19	12.34
36 37	8.02	20.02	3.65	1.73	1.92	5.53	7.45	12.57
38	8.43 8.86	20.53	3.66	1.73	1.93	5.78	7,70	12.83
39	9.32	21.07 21.65	3.66	1.73	1.93	6.03	7.96	13.12
40	9.81	22.26	3.67 3.67	1.74	1.93	6.28	8.21	13.43
41	10.32	22.26	3.67	1.74 1.74	1.93 1.93	6.53 6.79	8.47	13.79
42	10.87	23.58	3.68	1.75	1.93	7.04	8.72	14.18
43	11.44	24.31	3.68	1.75	1.94	7.04 7.29	8.98 9.23	14.61 15.08
44	12.05	25.07	3.70	1.75	1.95	7.54	9.49	15.58
45	12.70	25.87	3.70	1.75	1.95	7.79	9.74	16.13

Table 2

UNISEX	PREFERRED	PLUS	NONTOBACCO

		(1)	. (2)	(3)	(4) (2) ÷ (3)	(5)	(6) (4) + (5)	(7) (1) - (6)
ISSUE AGE	NET LEVEL ANNUAL PREMIUM	MAXIMUM FIRST YEAR EXPENSE ALLOWANCE	FIRST YEAR EXPENSE CHARGE	AVERAGE RENEWAL EXPENSE CHARGE	INITIAL ACQUIS EXPENSE CHARGE	MAXIMUM SURRENDER CHARGE	TOTAL CHARGES	UNUSED EXPENSE ALLOWANCE
			,		0.0.0.02	OHAROL	OHAROLO	ALLOWARDE
46	13.38	26.72	3.70	1.75	1.95	8,26	10.21	16,52
47	14.10	27.62	3.71	1.76	1.95	8.73	10.68	16.94
48	14.86	28.57	3.71	1.76	1.95	9.21	11.16	17.42
49	15.67	29.59	3.72	1.76	1.96	9.68	11.63	17.96
50	16.54	30.67	3.73	1.77	1.96	10.15	12.12	18.56
51	17.46	31.83	3.73	1.77	1.96	10.62	12.58	19.24
52	18,45	33.06	3.74	1.77	1.97	11.10	13.07	19.99
53	19,49	34.36	3.76	1.78	1.98	11.57	13.54	20.82
54	20.60	35.75	3.76	1.78	1.98	12.04	14.02	21.73
55 56	21.78	37,22	3.77	1.78	1.98	12.51	14.49	22.73
57	23.02	38.78	4.02	1.90	2.12	13.19	15.31	23,47
57 58	24.34 25.74	40.43	4.02	1.90	2.12	13,88	15.99	24.43
59	27.24	42.18 44.05	4.03 4.04	1.91	2.12	14.56	16.68	25.49
60	28.84	44.05 46.05	4.04	1.92	2.13	15.25	17.37	26.67
61	30.55	48.18	4.07	1.92 1.93	2.13	15.93	18.06	27.98
62	32.36	50,46	4.08	1.93	2.14 2.15	16.70 17.48	18.85	29.34
63	34.30	52.87	4.09	1.94	2.15	18.24	19.63 20.40	30.83
64	36.34	55.43	4.12	1.95	2.17	19.02	21.18	32.47 34.25
65	38.52	58,15	4.14	1.96	2.18	19.79	21.10	34.25 36.18
66	40.84	60.00	4.15	1.97	2.19	20,88	23.07	36.93
67	43.33	60.00	4.18	1.98	2.20	21.96	24.16	35.84
68	46.00	60.00	4.21	2.00	2.22	22,50	24.72	35.28
69	48.88	60.00	4.25	2.01	2.24	22.50	24.74	35.26
70	52.00	60.00	4.28	2.03	2.25	22.50	24.75	35.25
71	55.37	√ 60.00	4.32	2.05	2.27	22.50	24.77	35.23
72	59.01	60.00	4.37	2.07	2.30	22.50	24.80	35.20
73	62.91	60.00	4.43	2.10	2.33	22.50	24.83	35.17
74	67.10	60.00	4.52	2.14	2.38	22.50	24.88	35.12
75	71.63	60,00	4.63	2.19	2.44	22.50	24.94	35.06
76	76.52	60.00	4.79	2.27	2.52	22.50	25.02	34.98
77	81.84	60.00	5.03	2.38	2.65	22.50	25.15	34.85
78	87.58	60.00	5.51	2.61	2.90	22.50	25.40	34.60
79	93.78	60.00	6.83	3.23	3.59	22.50	26.09	33.91
80	100.43	60.00	8.16	3.87	4.29	22.50	26,79	33.21
81 82	107.58	60.00	9.47	4.48	4.98	22.50	27.48	32.52
83	115.18 123.28	60.00	10.80	5.12	5.68	22.50	28.18	31.82
84	131.96	60.00 60.00	12.12	5.74	6.38	22,50	28.88	31.12
85	141.21	60.00	13.45	6.37	7.08	22.50	29.58	30.42
0.5	141,21	90.00	14.77	7.00	7.77	22.50	30.27	29.73

Table 2

UNISEX PREFERRED NONTOBACCO

	· ·	(1)	(2)	(3)	(4). (2) + (3)	(5)	(6) (4) ÷ (5)	(7) (1) - (6)
		MAXIMUM	FIRST	AVERAGE	INITIAL		(1)	1.1 (0)
	NET LEVEL	FIRST YEAR	YEAR	RENEWAL	ACQUIS	MAXIMUM		UNUSED
ISSUE	ANNUAL	EXPENSE	EXPENSE	EXPENSE	EXPENSE	SURRENDER	TOTAL	EXPENSE
AGE	PREMIUM	ALLOWANCE	CHARGE	CHARGE	CHARGE	CHARGE	CHARGES	ALLOWANCE
• '								
0	1.63	12.04	3.85	1.82	2.03	2.16	4.19	7.85
1	1.67	12.09	3.85	1.82	2.03	2.30	4.32	7.77
2	1.73	12.16	3.85	1.82	2.03	2.42	4.45	7.72
3	1.80	12.25	3.85	1.82	2.03	2.56	4.58	7.67
4	1.88	12.36	3.85	1.82	2.03	2.68	4.71	7.65
5	1.97	12.46	3.85	1.82	2.03	2.82	4.84	7.62
6	2.06	12.58	3.85	1.82	2.03	2.94	4.97	7.61
7	2,16	12.70	3,85	1.82	2.03	3.08	5.11	7.60
8	2.26	12.83	3,85	1.82	2.03	3.20	5.23	7.60
9	2.37	12.97	3,85	1.82	2.03	3.34	5.37	7.60
10	2.49	13.11	3.85	1.82	2.03	3.47	5.49	7.61
11	2.61	13.26	3.85	1.82	2.03	3.60	5.63	7.63
12	2.73	13.41	3.85	1.82	2.03	3.73	5.75	7.66
13	2.86	13.57	3.85	1.82	2.03	3.86	5.89	7.68
14	2.99	13.74	3.85	1.82	2.03	3,99	6.01	7.73
15	3.13	13.91	3.85	1.82	2.03	4.12	6.15	7.76
16	3,27	14.08	3.85	1.82	2.03	4.25	6.28	7.81
17	3,41	14.26	3.85	1.82	2.03	4.38	6.41	7.85
18 19	3,55	14.44	3,85	1.82	2.03	4.51	6.54	7.90
20	3.70	14.63	3.85	1.82	2.03	4.64	6.67	7.95
20 21	3.86	14.82	3.64	1.72	1.91	3.10	5.01	9.81
21	4.02 4.20	15.03	3.64	1.72	1.91	3.22	5.14	9.89
23		15.24	3.65	1.73	1.92	3.34	5,26	9.99
23	4.38 4.58	15.47	3.65	1.73	1.92	3.47	5,39	10.09
25	4.78	15.72 \ 15.98	3.65	1.73	1.92	3.58	5.50	10.22
26	5.00		3.66	1.73	1.93	3.71	5.63	10.34
27	5.23	16.25 16.54	3.66 3.66	1,73	1,93	3.89	5.81	10.43
28	5.47	16.84	3,66	1.73	1.93	4.07	5.99	10.54
29	5.72	17.15	3,66	1.73	1.93	4.25	6.17	10.66
30	6.00	17.15		1.73	1,93	4.43	6.35	10.80
31	6.28	17.49	3,67 3.67	1.74	1.93	4.61	6.54	10.95
32	6.59	18.24	3.67	1.74 1.74	1.93	4.79	6.72	11.13
33	6.92	18.65	3.67	1.74	1,93	4.97	6.90	11.34
34	7.26	19.08	3.68	1.74	1.93	5.15	7.08	11.57
35	7.63	19.53	3.68	1.75	1.94	5.33	7.27	11.81
36	8.02	20.02	3.68	1.75	1.94	5.51	7.45	12.09
37	8.43	20.53	3.70	1.75	1.94 1.95	5.77	7.71	12.31
38	8.86	21.07	3.70	1.75		6.04	7.98	12.55
39	9.32	21.65	3.71	1.76	1.95	6.31	8.25	12.82
40	9.81	22.26	3.71	1.76	1.95 1.95	6.58 6.85	8.53	13.12
41	10.32	22.90	3.72	1.76	1.95 1.96		8.80	13.46
42	10.87	23.58	3.72	1.76	1.96 1.96	7.12	9.08	13.82
43	11.44	24.31	3.73	1.77	1.96	7.38	9.34	14.25
44	12.05	25.07	3.73	1.77	1.96	7.65 7.92	9.61	14.69
45	12.70	25.87	3.74	1.77	1.97	7.92 8.19	9.88	15.18
	0	20.07	<b>5.74</b> ,	1.77	1.37	0.19	10.16	15,71

Table 2

UNISEX PREFERRED NONTOBACCO

		(1)	(2)	(3)	(4)	(5)	(6)	(7)
ISSUE AGE	NET LEVEL ANNUAL PREMIUM	MAXIMUM FIRST YEAR EXPENSE ALLOWANCE	FIRST YEAR EXPENSE CHARGE	AVERAGE RENEWAL EXPENSE CHARGE	(2) + (3) INITIAL ACQUIS EXPENSE CHARGE	MAXIMUM SURRENDER CHARGE	(4) + (5)  TOTAL  CHARGES	(1) - (6)  UNUSED  EXPENSE  ALLOWANCE
46	13.38	26,72	3.74	1.77	1.97	8.67	10.64	16.09
47	14.10	27.62	3.76	1.78	1.98	9.14	11.12	16.50
48	14.86	28.57	3.76	1.78	1.98	9.62	11.60	16.98
49	15.67	29.59	3.77	1.78	1.98	10.10	12.08	17.51
50	16.54	30.67	3.78	1.79	1.99	10.58	12.56	18.11
51	17.46	31.83	3.79	1.80	2.00	11.05	13.05	18.78
52	18.45	33,06	3.79	1.80	2.00	11.53	13.52	19.53
53	19.49	34.36	3.80	1.80	2,00	12.01	14.01	20.36
54	20.60	. 35.75	3.82	1.81	2.01	12.48	14.49	21.26
55	21.78	37.22	3.83	1.81	2.01	12.96	14.97	22.25
56	23.02	38.78	4.07	1.93	2.14	13.78	15.92	22.86
57	24.34	40.43	4.08	1,93	2.15	14.60	16.75	23.68
58	25.74	42.18	4.09	1.94	2.15	15.41	17.56	24.62
59	27.24	44.05	4.10	1.94	2.16	16.23	18.39	25,66
60	28.84	46.05	4.12	1.95	2.17	17.05	19.21	26.83
61 62	30.55	48.18	4.13	1.96	2.17	17.93	20.10	28.08
62 63	32.36	50.46	4.14	1.96	2.18	18.80	20.98	29,48
64	34.30	52.87	4.16	1.97	2.19	19.68	21.87	30.99
65	36.34	55.43	4.18	1.98	2.20	20.56	22.75	32.68
66	38.52 40.84	58.15 60.00	4.20	1.99	2.21	21.44	23.65	34.51
67	43.33	60.00	4.22	2,00	2.22	22.50	24.72	35.28
68	46,00	60.00	4.25	2.01	2.24	22.50	24.74	35.26
69	48.88	60.00	4.28 4.32	2.03	2.25	22.50	24.75	35.25
70	52.00	60.00	4.32 4.36	2.05	2.27	22.50	24.77	35.23
71	55.37	₹ 60.00	4,36	2.06	2.29	22.50	24.79	35.21
72	59.01	60.00	4.45	2.08	2.31	22.50	24.81	35.19
73	62.91	60.00	4.52	2.11 2.14	2.34	22.50	24.84	35.16
74	67.10	60.00	4.61	2.14	2.38	22.50	24.88	35.12
75	71.63	60.00	4.73	2.16	2.43 2.49	22.50 22.50	24.93	35.07
76	76.52	60.00	4.90	2.32	2.58	22.50 22.50	24.99	35.01
77	81.84	60.00	5.16	2.44	2.72	22.50	25.08	34.92
78	87.58	60.00	5.68	2.69	2.99	22.50	25.22	34.78
79	93.78	60.00	7.09	3.36	3.73	22.50	25,49 26,23	34.51
80	100.43	60.00	8.52	4.04	4.48	22.50	26.23	33.77
81	107,58	60,00	9.94	4.71	5.23	22.50	26.98 27.73	33.02
82	115.18	60.00	11.36	5.38	5.98	22.50	28.48	32.27
83	123.28	60.00	12.78	6.05	6.73	22.50	29.23	31.52 30.77
84	131.96	60.00	14.21	6.73	7,48	22.50	29.98	30.77
85	141.21	60.00	15.64	7.41	8.23	22.50	30.73	29.27
							00.70	23.21

Table 2

	UNISEX NONT	OBACCO						
		(1) MAXIMUM	(2)	(3) AVERAGE	(4) (2) + (3) INITIAL	(5)	(6) (4) + (5)	(7) (1) - (6)
ISSUE AGE	NET LEVEL ANNUAL PREMIUM	FIRST YEAR EXPENSE ALLOWANCE	YEAR EXPENSE CHARGE	RENEWAL EXPENSE CHARGE	ACQUIS EXPENSE CHARGE	MAXIMUM SURRENDER CHARGE	TOTAL CHARGES	UNUSED EXPENSE ALLOWANCE
0	1.63	12.04	3.85	1.82	2.03	2.16	4.19	7.85
1	1.67	12.09	3.85	1.82	2.03	2,30	4.32	7.77
2	1.73	12.16	3.85	1.82	2.03	2.42	4.45	7.72
3	1.80	12,25	3.85	1.82	2.03	2.56	4.58	7.67
4	1.88	12.36	3.85	1.82	2.03	2.68	4,71	7.65
5	1.97	12.46	3,85	1.82	2.03	2.82	4.84	7.62
6	2.06	12.58	3.85	1.82	2.03	2.94	4.97	7.61
.7	2.16	12.70	3.85	1.82	2.03	3,08	5.11	7.60
8	2.26	. 12.83	3,85	1.82	2.03	3,20	5.23	7.60
9	2.37	12.97	3.85	1.82	2.03	3.34	5,37	7.60
10	2.49	13.11	3.85	1.82	2.03	3.47	5,49	7.61
11	2.61	13.26	3.85	1.82	2.03	3.60	5.63	7.63
12	2.73	13.41	3.85	1.82	2.03	3.73	5.75	7.66
13	2.86	13.57	3.85	1.82	2.03	3.86	5.89	7.68
14	2.99	13.74	3.85	1.82	2.03	3.99	6.01	7.73
15	3.13	13.91	3,85	1.82	2.03	4.12	6.15	7.76
16	3.27	14.08	3.85	1.82	2.03	4.25	6.28	7.81
17	3.41	14.26	3,85	1.82	2.03	4.38	6.41	7.85
18	3.55	14.44	3.85	1.82	2.03	4.51	6.54	7.90
19	3.70	14.63	3.85	1.82	2.03	4.64	6.67	7.95
20	3.86	14.82	3.64	1.72	1.91	3.59	5.50	9.31
21	4.02	15.03	3.64	1.72	1.91	3.74	5.65	9.38
22	4.20	15,24	3.65	1.73	1.92	3.88	5.80	9.45
23	4.38	15.47	3.65	1.73	1.92	4.01	5.93	9.54
24	4.58	15.72	3.65	1.73	1.92	4.16	6.08	9.64
25	4.78	15,98	3.66	1.73	1.93	4.30	6.23	9.75
26	5.00	16.25	3.66	1.73	1.93	4.51	6.44	9.81
27	5.23	16.54	3.66	1.73	1.93	4.71	6.63	9.90
28	5.47	16.84	3.66	1.73	1.93	4.91	6.84	10.00
29	5.72	17.15	3.67	1.74	1.93	5.11	7.04	10,11
30	6.00	17.49	3.67	1.74	1.93	5.32	7.25	10.24
31	6.28	17.86	3.67	1.74	1.93	5.53	7.46	10.40
32	6.59	18.24	3.68	1.75	1.94	5.72	7.66	10,58
33	6.92	18.65	3.68	1.75	1.94	5,93	7.87	10.78
34	7.26	19.08	3.70	1.75	1.95	6.13	8.07	11.00
35	7.63	19.53	3.70	1.75	1.95	6.34	8.28	11.25
36	8.02	20.02	3.70	1.75	1.95	6.67	8.61	11.41
37	8.43	20.53	3.71	1.76	1.95	7.00	8.95	11.58
38	8.86	21.07	3.71	1.76	1.95	7.33	9.28	11.80
39	9.32	21.65	3.72	1.76	1.96	7.66	9.62	12.03
40	9.81	22.26	3.72	1.76	1.96	7.99	9.95	12.31
41	10.32	22.90	3.72	1.76	1.96	8.33	10.28	12,62
42	10.87	23.58	3.73	1.77	1.96	8.66	10.62	12.96
43	11.44	24.31	3.73	1.77	1.96	8.98	10,95	13.36
44	12.05	25.07	3.73	1.77	1.96	9,32	11.28	13,79
. 45	12.70	25.87	3.74	1.77	1.97	9,65	11.62	14.25

Table 2

UNISEX	NONTORACCO
CINISEX	NONTORAGE

		(1)	(2)	(3)	(4) (2) + (3)	(5)	(6) (4) + (5)	(7) (1) - (6)
ISSUE AGE	NET LEVEL ANNUAL PREMIUM	MAXIMUM FIRST YEAR EXPENSE ALLOWANCE	FIRST YEAR EXPENSE CHARGE	AVERAGE RENEWAL EXPENSE CHARGE	INITIAL ACQUIS EXPENSE CHARGE	MAXIMUM SURRENDER CHARGE	TOTAL CHARGES	UNUSED EXPENSE ALLOWANCE
46	13.38	26.72	3.74	1.77	1.97	10.28	12.25	14,47
47	14.10	27.62	3.76	1.78	1.98	10.91	12.88	14.74
48	14.86	28.57	3.76	1.78	1,98	11.53	13.51	15.07
49	15.67	29.59	3.77	1.78	1:98	12.16	14.14	15.45
<b>~ 50</b>	16.54	30.67	3.78	1.79	1.99	12.79	14.78	15.90
51	17.46	31.83	3.79	1.80	2.00	13.42	15,41	16.41
52	18.45	33.06	3.79	1.80	2.00	14.05	16.04	17.01
53	19.49	34.36	3.80	1.80	2.00	14.67	16.67	17.69
54	20.60	35.75	3.82	1.81	2.01	15.30	17.31	18.44
55 56	21.78 23.02	37.22	3.83	1.81	2.01	15,93	17.94	19.28
57	24.34	38.78 40.43	4.07 4.08	1.93 1.93	2.14 2.15	16.84	18.98	19.80
58	25.74	42.18	4,09	1.94	2.15	17.74 18.65	19.89 20.80	20.54
59	27.24	44.05	4.10	1.94	2.16	19.56	21.72	21.38 22.33
60	28.84	46.05	4.13	1.96	2.17	20.46	22.63	23.42
61	30.55	48.18	4.14	1.96	2.18	21.48	23,66	24.52
62	32.36	50.46	4.16	1.97	2.19	22.50	24.69	25.76
63	34,30	52.87	4.18	1.98	2.20	22.50	24.70	28.17
64	36.34	55.43	4.20	1.99	2.21	22.50	24.71	30.72
65	38.52	58.15	4.21	2.00	2.22	22.50	24.72	33.44
66	40.84	60.00	4.33	2.05	2.28	22.50	24.78	35.22
67	43.33	60.00	4.37	2.07	2.30	22.50	24.80	35.20
68	46.00	60.00	4.40	2.09	2.32	22.50	24.82	35.18
69	48.88	60.00	4.44	2.10	2.34	22.50	24.84	35.16
70	52.00	60.00	4.48	2.12	2.36	22.50	24.86	35.14
71 72	55.37	₹ 60.00	4.54	2.15	2.39	22.50	24.89	35.11
73	59.01 62.91	60.00	4.60	2.18	2.42	22.50	24.92	35.08
74	67.10	60,00 60,00	4.67 4.78	2.21 2.26	2.46	22.50	24.96	35.04
75	71,63	60.00	4.78 4.90	2.32	2.51 2.58	22.50 22.50	25.01 25.08	34.99
76	76.52	60.00	5.09	2.32	2.68	22.50	25.18	34,92 34.82
77	81.84	60.00	5.39	2.55	2.84	22.50	25.34	34.66
78	87.58	60.00	5.95	2.82	3.13	22.50	25.63	34.37
79	93.78	60.00	7.54	3.57	3.97	22.50	26.47	33.53
80	100.43	60.00	9.12	4.32	4.80	22.50	27.30	32.70
81	107.58	60.00	10.72	5,08	5.64	22.50	28.14	31.86
82	115.18	60.00	12.30	5.83	6.47	22.50	28.97	31.03
83	123.28	60.00	13.88	6.58	7.31	22.50	29.81	30.19
84	131.96	60.00	15.47	7.33	8.14	22.50	30.64	29.36
85	141.21	60.00	17.05	8.08	8.97	22.50	31.47	28.53

Table 2

	UNISEX PREFER	RRED TOBACCO						
		(1)	(2)	(3)	(4) (2) + (3)	(5)	(6) (4) + (5)	(7) (1) - (6)
ISSUE AGE	NET LEVEL ANNUAL PREMIUM	MAXIMUM FIRST YEAR EXPENSE ALLOWANCE	FIRST YEAR EXPENSE CHARGE	AVERAGE RENEWAL EXPENSE CHARGE	INITIAL ACQUIS EXPENSE CHARGE	MAXIMUM SURRENDER CHARGE	TOTAL CHARGES	UNUSED EXPENSE ALLOWANCE
0	2.08	12.60	3.85	1.82	2.03	2.16	4.19	8.42
1	2.15	12.69	3.85	1.82	2.03	2.30	4.32	8.36
2	2.24	12.80	3,85	1.82	2.03	2.42	4.45	8.35
3	2.34	12.92	3.85	1.82	2.03	2.56	4.58	8.34
4	2.45	13.06	3.85	1.82	2.03	2.68	4.71	8.35
5	2.56	13.20	3.85	1.82	2.03	2.82	4.84	8.36
6	2.69	13.36	3.85	1.82	2.03	2.94	4.97	8.39
7	2.82	13.53	3.85	1.82	2.03	3.08	5.11	8.42
8	2.96	13.70	3.85	1.82	2.03	3.20	5.23	8.47
9	3.11	13.88	3.85	1.82	2.03	3.34	5.37	8.52
10	3.26	14.08	3,85	1.82	2.03	3.47	5.49	8.58
11	3.42	14.28	3.85	1.82	2.03	3.60	5.63	8.65
12	3,59	14.49	3.85	1.82	2.03	3,73	5.75	8.74
13	. 3.77	14.71	3.85	1.82	2.03	3,86	5.89	8.83
14	3.96	14.95	3.85	1.82	2.03	3.99	6.01	8.93
15	4.15	15.19	3.85	1.82	2.03	4.12	.6.15	9.04
16	4.35	15.43	3.85	1.82	2.03	4.25	6.28	9.16
17	4.55	15.69	3.85	1.82	2.03	4,38	6.41	9,28
18	4.76	15.95	3.85	1.82	2.03	4.51	6.54	9,41
19	4.98	16,22	3.85	1.82	2.03	4.64	6.67	9.55 10.30
20	5.21	16.51	3.84	1.82	2.02	4.19	6.21 6.50	10.30
21	5.44	16,80	3.84	1.82	2.02	4.48		10.30
22	5,68	17.10	3.84	1.82	2.02	4.78	6.80 7.10	10.31
23	5,93	17.42	3.85	1.82	2.03	5.08	7.10	10.35
24	6.20	17.75	3.85	1.82	2.03	5.37 5.67	7.70	10.39
25	6,48	√ 18.10	3,86	1.83	2.03	5.95	7.98	10.48
26	6.77	18.46	3.86	1.83	2.03	6.23	8.26	10.58
27	7.07	18.84	3.86	1.83	2.03 2.04	6.51	8.55	10.69
28	7.39	19.24	3.88	1.84	2.04	6.79	8.83	10.84
29	7.73	19.66	3.88	1.84	2.04	7.07	9.11	11.00
30	8.09	20.12	3.89	1.84 1.84	2.05	7.34	9.39	11.21
31	8,48	20.60	3.89 3.90	1.85	2.05	7.62	9.68	11.43
32	8.89	21.11	3.90 3.90	1.85	2.05	7.90	9.95	11.70
33	9.32	21.65 22.23	3.90 3.90	1.85	2.05	8.18	10.23	12.00
34 35	9.78	22.23	3.91	1.85	2.06	8.46	10.52	12.32
	10.27 10.79	22.84	3.91	1.85	2.06	8.96	11.01	12.48
36 37		23.49	3.92	1.86	2.07	9.44	11.51	12.67
38	11.34 11.93	24.16	3.92	1.86	2.07	9.94	12.00	12.91
38	11.93	24.91 25.68	3.94	1.86	2.07	10,42	12.49	13.19
39 40	13.20	26.50	3.94	1.86	2.07	10.92	12.99	13.51
41	13.89	27.36	3.95	1.87	2.08	11.41	13.49	13.87
42	14.62	28.27	3.95	1.87	2.08	11.90	13.98	14.30
43	15.39	29.24	3.95	1.87	2.08	12.39	14.47	14.77
44	16.20	30,25	3.96	1,88	2.08	12:88	14.96	15.29
45	17.06	31,32	3.96	1.88	2.08	13.37	15.46	15.86
70	17.00	0,,02						

Table 2

	UNISEX PREFEI	RRED TOBACCO						
		(1)	(2)	(3)	(4) (2) + (3)	(5)	(6) (4) ÷ (5)	(7) (1) - (6)
ISSUE AGE	NET LEVEL ANNUAL PREMIUM	MAXIMUM FIRST YEAR EXPENSE ALLOWANCE	FIRST YEAR EXPENSE	AVERAGE RENEWAL EXPENSE	INITIAL ACQUIS EXPENSE	MAXIMUM SURRENDER	TOTAL	UNUSED EXPENSE
70	TALMION	ALLOWANGE	CHARGE	CHARGE	CHARGE	CHARGE	CHARGES	ALLOWANCE
46	17.95	32.44	3.97	1,88	2.09	14.18	16,27	16.17
47	18.90	33.62	3.98	1.89	2.10	15.00	17.10	16.17
48	19.90	34.87	4.00	1.89	2.10	15.81	17.92	16.96
49	20.96	36.21	4.00	1.89	2.10	16.63	18.74	17.47
50	22.10	37.63	4.01	1,90	2.11	17.44	19.55	18.08
51	23.31	39.14	4.02	1.90	2.12	18,25	20.37	18.77
52	24.60	40.75	4.03	1.91	2.12	19,07	21.19	19.56
53	25.96	42.45	4.04	1.92	2.13	19,88	22.01	20.44
54	27,40	44.25	4.06	1.92	2,13	20,70	22.83	21.41
55	28,91	46.14	4.07	1.93	2,14	21.51	23.65	22.49
56	30.49	48.12	4.32	2.05	2.27	22.50	24.77	23.34
57	32.16	50.20	4.33	2.05	2.28	22.50	24.78	25.42
58	33,92	52.40	4.36	2.06	2.29	22.50	24.79	27.60
59	35.79	54.74	4.36	2.06	2.29	22.50	24.79	29.94
60	37.78	57.23	4.38	2.07	2.31	22.50	24.81	32.42
61	39,90	59.88	4.39	2.08	2.31	22.50	24.81	35.07
62	42.14	60.00	4.42		2.32	22.50	24.82	35.18
63	44.49	60,00	4.44	2.10	2.34	22.50	24.84	35.16
64	46.95	60.00	4.46	2.11	2.35	22.50	24.85	35.15
65	49.54	60,00	4.50	2.13	2.37	22.50	24.87	35.13
66	52.27	60.00	4.52	2.14	2.38	22.50	24.88	35.12
67	55.17	60.00	4.55	2.15	2.39	22.50	24.89	35.11
68	58.28	60.00	4.60	2.18	2.42	22.50	24.92	35.08
69	61.63	60.00	4.64	2.20	2.44	22,50	24.94	35.06
70	65.25	60.00	4.69	2.22	2.47	22.50	24.97	35.03
71	69.15	60.00	4.74	2.25	2.49	22.50	24.99	35.01
72	73.37	60.00	4.82	2.29	2.54	22.50	25.04	34,96
73	77.85	60,00	4.91	2.32	2.58	22.50	25.08	34.92
74	82,65	60.00	5.03	2.38	2.65	22.50	25.15	34.85
75	87.83	60.00	5.18	2,46	2.73	22.50	25.23	34.77
76	93.40	60.00	5.40	2.56	2.84	22.50	25.34	34.66
77	99.42	60.00	5.74	2.72	3.02	22.50	25.52	34.48
78	105.91	60.00	6.41	3.04	3.37	22.50	25,87	34.13
79	112.85	60.00	8.26	3.91	4.35	22.50	26.85	33.15
80	120.24	60.00	10.09	4.78	5.31	22.50	27.81	32.19
81	128.12	60.00	11.94	5.66	6.28	22.50	28.78	31.22
82	136,39	60.00	13.80	6.54	7.26	22.50	29.76	30.24
83	145.13	60.00	15.65	7.41	8.24	22.50	30.74	29.26
84	154.42	60.00	17.50	8.29	9.21	22.50	31.71	28.29
85	164.27	60.00	19.33	9.16	10.17	22.50	32.67	27.33
								21.00

Table 2

UNISEX TOBACCO

	ONIOLA TODAC							
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
		ESA VISSI INS	FIDAT		(2) + (3)		(4) + (5)	(1) - (6)
	NET LEVEL	MAXIMUM	FIRST	AVERAGE	INITIAL			
ISSUE	ANNUAL	FIRST YEAR	YEAR	RENEWAL	ACQUIS	MAXIMUM		UNUSED
AGE	PREMIUM	EXPENSE	EXPENSE	EXPENSE	EXPENSE	SURRENDER	TOTAL	EXPENSE
AGE	PREMIUM	ALLOWANCE	CHARGE	CHARGE	CHARGE	CHARGE	CHARGES	ALLOWANCE
0	2,08	12.60						
1	2.15	12.69	3.85 3.85	1.82	2.03	2.16	4.19	8.42
2	2.24	12.80	3.85	1.82	2.03	2.30	4.32	8.36
- 3	2.34	12.92	3.85	1.82	2.03	2.42	4.45	8.35
4	2.45	13.06	3,85	1.82	2.03	2.56	4.58	8.34
5	2.56	13.20	3.85	1.82 1.82	2,03	2.68	4.71	8.35
6	2.69	13.36	3.85	1.82	2.03	2,82	4.84	8.36
7	2.82	13.53	3.85	1.82	2.03	2.94	4.97	8.39
8	2.96	13,70	3,85	1.82	2.03	3.08	5.11	8.42
9	3.11	13.88	3.85	1.82	2.03	3.20	5.23	8.47
10	3.26	14.08	3.85	1.82	2.03 2.03	3.34	5.37	8.52
11	3.42	14.28	3.85	1.82	2.03	3.47	5.49	8.58
12	3.59	14.49	3.85	1.82	2.03	3.60	5.63	8.65
13	3.77	14.71	3.85	1.82	2.03	3.73	5.75	8.74
14	3.96	14.95	3.85	1.82	2.03	3,86	5.89	8.83
15	4.15	15.19	3.85	1.82	2.03	3.99 4.12	6.01	8.93
16	4.35	15.43	3.85	1.82	2.03	4.12	6.15	9.04
17	4.55	15.69	3.85	1.82	2.03	4.25	6.28 6.41	9.16
18	4.76	15.95	3.85	1.82	2.03	4.51	6.54	9.28
19	4.98	16.22	3.85	1.82	2.03	4.64	6.67	9.41
20	5.21	16.51	3.85	1.82	2.03	4.77	6,80	9.55
21	5.44	16.80	3.85	1.82	2.03	5.05	7.08	9.71
22	5.68	17.10	3,85	1.82	2.03	5.33	7.36	9.72 9.74
23	5.93	17.42	3.86	1.83	2.03	5.60	7.63	9.78
24	6.20	17.75	3.86	1.83	2.03	5.88	7.91	9.84
25	6.48	18.10	3.88	1.84	2.04	6.16	8,20	9.90
26	6.77	18.46	3.88	1.84	2.04	6.50	8.54	9.92
27	7.07	18.84	3.88	1.84	2.04	6.83	8.87	9.97
28	7.39	19.24	3.89	1.84	2.05	7.17	9.22	10.02
. 29	7.73	19.66	3,89	1.84	2.05	7.51	9.55	10,11
30	8.09	20.12	3.90	1.85	2.05	7.85	9.90	10.22
31	8.48	20.60	3.90	1.85	2.05	8.18	10.23	10.36
32	8.89	21.11	3.91	1.85	2.06	8.52	10.58	10.53
33	9.32	21.65	3.91	1.85	2.06	8.86	10.91	10.74
34	9.78	22.23	3.92	1.86	2.07	9.20	11.26	10.97
35 36	10.27	22.84	3.92	1.86	2.07	9.53	11.60	11.25
	10.79	23.49	3.94	1.86	2.07	10.13	12.20	11.30
37 38	11,34	24.18	3.94	1.86	2.07	10.72	12.79	11.39
39	11.93	24.91	3.95	1.87	2.08	11.32	13.40	11.51
39 40	12.54	25.68	3.95	1.87	2,08	11.92	13.99	11.69
41	13.20 13.89	26,50	3.96	1.88	2.08	12.51	14.59	11.90
42	13.89	27.36	3.97	1.88	2.09	13.10	15.19	12.17
43	15.39	28.27	3.97	1.88	2.09	13.70	15.79	12.49
44	16,20	29.24	3.98	1.89	2.10	14.30	16.40	12.84
45	17.06	30.25	3.98	1.89	2.10	14:90	16,99	13.26
,,,,	17.00	31.32	4.00	1.89	2.10	15,49	17.59	13.73

Table 2

UN	ISEX	TOB	ACC	^

		(1)	(2)	(3)	(4) (2) + (3)	(5)	(6)	(7)
ISSUE	NET LEVEL ANNUAL	MAXIMUM FIRST YEAR	FIRST YEAR	AVERAGE RENEWAL	INITIAL ACQUIS	MAXIMUM	(4) + (5)	(1) - (6) UNUSED
AGE	PREMIUM	EXPENSE ALLOWANCE	EXPENSE CHARGE	EXPENSE CHARGE	EXPENSE CHARGE	SURRENDER CHARGE	TOTAL CHARGES	EXPENSE ALLOWANCE
46	17.95	32.44	4.00	1.89	2.10	16.41	18.51	42.00
47	18.90	33.62	4.01	1.90	2.11	17,33	19,43	13,93 14,19
48	19.90	34.87	4.02	1.90	2.12	18.24	20.36	14.51
49	20.96	36.21	4.03	1.91	2.12	19.16	21.28	14.92
50	22.10	37.63	4.04	1.92	2.13	20.09	22.22	15.41
51	23.31	39.14	4.04	1.92	2.13	21,01	23.13	16.01
52	24.60	40.75	4.07	1.93	2.14	21,92	24.07	16.69
53	25.96	42.45	4.08	1,93	2.15	22.50	24.65	17.80
54	27.40	44.25	4.09	1.94	2.15	22.50	24.65	19.59
55	28.91	46.14	4.10	1.94	2.16	22.50	24.66	21.48
56	30.49	48.12	4.45	2.11	2.34	22.50	24.84	23.28
57	32.16	50,20	4.48	2.12	2.36	22.50	24.86	25.35
58	33.92	52,40	4.49	2.13	2.36	22.50	24.86	27.53
59 60	35.79	54.74	4.50	2.13	2.37	22.50	24.87	29.87
61	37.78	57.23	4.52	2.14	2.38	22.50	24.88	32.35
62	39.90 42.14	59.88	4.54	2.15	2.39	22.50	24.89	34.99
63	44.49	60.00	4,56	2.16	2.40	22.50	24.90	35.10
64	46.95	60.00 60.00	4,60	2.18	2.42	22.50	24.92	35.08
65	49.54	60.00	4.62	2.19	2.43	22.50	24.93	35.07
66	52.27	60.00	4.64	2.20	2.44	22.50	24.94	35,06
67	55.17	60.00	4.68 . 4.72	2.22	2.46	22.50	24.96	35.04
68	58.28	60.00	4.76	2.23	2.48	22.50	24.98	35.02
69	61.63	60.00	4.81	2.26	2.51	22.50	25.01	34.99
70	65.25	60.00	4.86	2.28	2.53	22.50	25.03	34.97
71	69.15	60.00	4.93	2.30 2.34	2.56	22.50	25.06	34.94
72	73.37	√ 60.00	5.02	2.38	2.60 2.64	22.50	25.10	34.90
73	77.85	60.00	5.12	2.43	2.70	22,50	25.14	34.86
74	82.65	60.00	5.24	2.48	2.76	22.50	25,20	34.80
75	87.83	60.00	5.42	2.57	2.85	22.50	25.26	34.74
76	93.40	60.00	5.66	2.68	2.98	22.50 22.50	25.35	34.65
77	99.42	60.00	6.05	2.86	3.18	22.50	25.48	34.52
78	105.91	60.00	6,79	3.22	3.57	22.50	25.68 26.07	34.32
79	112.85	60.00	8.87	4.20	4.67	22.50	26.07 27.17	33.93
80	120.24	60.00	10.96	5.19	5.77	22.50	27.17 28.27	32.83
81	128.12	60.00	13.02	6.17	6.85	22.50	28.27 29.35	31.73
82	136.39	60.00	15.11	7.16	7.95	22.50	30.45	30.65 29.55
83	145.13	60.00	17.17	8.13	9.04	22.50	31.54	29.55 28.46
84	154.42	60.00	19.26	9.12	10.14	22.50	32.64	27.36
85	164.27	60.00	21.34	10.11	11.23	22.50	33.73	26.27

20

**Unisex Nontobacco** 

Initial Expense Allowance:

14.82

Total Initial Acquisition Exp Chg:

1.91

		Exper	nse Allowance	
Policy	Attained	New	Increase	Surrender
Year	Age	Issue		Charge
1	20	12.91	12.91	3.59
2	21	12.86	12.86	3.23
3	22	12.82	12.82	2.98
4	23	12.78	12.78	2.73
5	24	12.73	12.73	2.48
6	25	12.68	12.68	2.23
7	26	12.62	12.62	1.98
8	27	12.57	12.57	1.72
9	28	12.51	12.51	1.47
10	29	12.45	12.45	1.22
11 12 13 14 15	30 31 32 33 34	12.39 12.32 12.25 12.18 12.10	12.39 12.32 12.25 12.18 12.10	0.97 0.72 0.47 0.22
16	35	12.02	12.02	
21	40	11.57	11.57	
26	45	11.01	11.01	
31	50	10.35	10.35	
36	55	9.57	9.57	
41	60	8.69	8.69	
46	65	7.71	7.71	
51	70	6.67	6.67	
56	75	5.57	5.57	
61	80	4.49	4.49	
66	85	3.52	3.52	
71	90	2.75	2.75	
76	95	2.15	2.15	
81	100	1.73	1.73	
86	105	1.34	1.34	
91	110	1.02	1.02	
96	115	0.80	0.80	
97	116	0.76	0.76	
98	117	0.72	0.72	
99	118	0.69	0.69	
100	119	0.66	0.66	

Table 3

35

### **Unisex Nontobacco**

Initial Expense Allowance:

19.53

Total Initial Acquisition Exp Chg:

1.95

		Expense	Allowance	
Policy	Attained	New		Surrender
Year	Age	Issue	Increase	Charge
1	35	17.59	17.59	6.34
2	36	17.47	17.47	5.70
3	37	17.34	17.34	5.26
4	38	17. <del>2</del> 1	17.21	4.82
5	39	17.07	17.07	4.37
6	40	16.92	16.92	3.93
7	41	16.77	16.77	3.48
8	42	16.62	16.62	3.04
9	43	16.45	16.45	2.60
10	44	16.29	16.29	2.15
11	45	16.11	16.11	1.71
12	46	15.93	15.93	1.27
13	47	15.75	15.75	0.82
14	48	15.55	15.55	0.38
15	49	15.35	15.35	-
16	50	15.15	15.15	
21	55	14.00	14.00	
26	60	12.71	12.71	
31	65	11.28	11.28	
36	70	9.75	9.75	
41	75	8.15	8.15	
46	80	6.56	6.56	
51	85	5.15	5.15	
56	90	4.02	4.02	
61	95	3.15	3.15	
66	100	2.53	2.53	
71	105	1.96	1.96	
76	110	1.50	1.50	
81	115	1.17	1.17	
82	116	1.11	1.11	
83	117	1.05	1.05	
84	118	1.00	1.00	
85	119	0.97	0.97	
86	120	-	-	

Table 3

65

### **Unisex Nontobacco**

Initial Expense Allowance:

58.15

Total Initial Acquisition Exp Chg:

2.22

Policy	Attained	New		Surrender
Year	Age	Issue	Increase	Charge
				orial go
1	65	55.94	55.94	22.50
2	66	54.47	54.47	20.25
3	67	52.98	52.98	18.68
4	68	51.47	51.47	17.10
5	69	49.93	49.93	15.53
6.	70	48.37	48.37	13.95
7	71	46.79	46.79	12.38
8	72	45.19	45.19	10.80
9	73	43.59	43.59	9.23
10	74	42.00	42.00	7.65
11	75	40.41	40.41	6.08
12	76	<sup>7</sup> 38.81	38.81	4.50
13	77	37.22	37.22	2.93
14	78	35.64	35.64	1.35
15	79	34.08	34.08	_
16	80	32.55	32.55	
21	. 85	25.52	25.52	
26	90	19.92	19.92	
31	95	15.61	15.61	
36	100	12.56	12.56	
44	405			
41	105	9.72	9.72	
46	110	7.42	7.42	
51	115	5.78	5.78	
52	116	5.50	5.50	
53	117	5.22	5.22	
54 55	118	4.98	4.98	
55	119	4.82	4.82	
56	120	-	-	

Table 3

85

### **Unisex Nontobacco**

Initial Expense Allowance:

60.00

Total Initial Acquisition Exp Chg:

8.97

Policy	Attained	New		Surrender
Year	Age	Issue	Increase	Charge
				, 5
. 1	85	51.03	51.03	22.50
2	86	48.51	48.51	20.25
3	87	46.10	46.10	18.68
. 4	88	43.85	43.85	17.10
5	89	41.76	41.76	15.53
6	90	39.83	39.83	13.95
7	91	38.04	38.04	12.38
8	92	36.25	36.25	10.80
9	93	34.49	34.49	9.23
10	94	32.80	32.80	7.65
11	95	31.21	31.21	6.08
12	96	29.81	29.81	4.50
13	97	28.55	28.55	2.93
14	98	27.48	27.48	1.35
15	99	26.31	26.31	-
16	100	25.12	25.12	
21	105	19.43	19.43	
26	110	14.83	14.83	
27	111	14.11	14.11	
28	112	13.45	13.45	
29	113	12.84	12.84	
30	114	12.16	12.16	
31	115	11.56	11.56	•
32	116	10.99	10.99	
33	117	10.43	10.43	
. 34	118	9.95	9.95	
35	119	9.63	9.63	
36	120	-	· •	

Table 4 - Form FL-08(U) Flexible Premium Adjustable Life Maximum Surrender Charge Premiums

Issue	Preferred	Preferred		Preferred	-
<u>Age</u>	Plus NT	<u>NT</u>	<u>Nontobacco</u>	<u>Tobacco</u>	<u>Tobacco</u>
0	2.40	2.40	2.40	2.40	2.40
1	2.55	2.55	2.55	2.55	2.55
2	2.69	2.69	2.69	2.69	2.69
3	2.84	2.84	2.84	2.84	,
4	2.98	2.98	2.98		2.84
5	3.13	3.13	3.13	2.98	2.98
6	3.13	3.13	3.13	3.13	3.13
7	3.42	3.42	3.42	3.27	3.27
8	3.56	3.56	3.42	3.42 3.56	3.42
9	3.71	3.71	3.71		3.56
10	3.85	3.85	3.71	3.71	3.71
11	4.00	4.00	4.00	3.85	3.85
12	4.14	4.14	4.00	4.00 4.14	4.00
13	4.29	4.29	4.14	4.14	4.14
14	4.43	4.43	4.29	4.29 4.43	4.29
15	4.58	4.58	4.58	4.43 4.58	4.43
16	4.72	4.72	4.72	4.36 4.72	4.58
17	4.87	4.87	4.87	4.72 4.87	4.72
18	5.01	5.01	5.01	4.07 5.01	4.87
19	5.16	5.16	5.16		5.01
20	3.21	3.44	3.99	5.16	5.16
21	3.34	3.58	4.15	4.65 4.98	5,30
22	3.46	3.71	4.13		5.61
23	3.59	3.85	4.46	5.31	5.92
24	3.71	3.98	4.62	5.64 5.97	6.22
25	3.84	4.12	4.78	6.30	6.53
26	4.04	4.32	5.01	6.61	6.84
27	4.24	4.52	5.23	6.92	7.22
28	4.45	4.72	5.46	7.23	7.59
29	4.65	4.92	5. <del>4</del> 0 5.68	7.23 7.54	7.97
30	4.85	5.12	5.91	7.85	8.34
31	5.05	5.32	6.14	8.16	8.72
32	5.25	5.52	6.36	8.47	9.09 9.47
33	5.46	5.72	6.59	8.78	
34	5.66	5.92	6.81	9.09	9.84
35	5.86	6.12	7.04	9.40	10.22
36	6.14	6.41	7.41	9.95	10.59 11.25
37	6.42	6.71	7.78	10.49	11.23
38	6.70	7.01	8.14	11.04	12.58
39	6.98	7.31	8.51	11.58	13.24
40	7.26	7.61	8.88	12.13	
41	7.54	7.91	9.25	12.13	13.90 14.56
42	7.82	8.20	9.62	13.22	
43	8.10	8.50	9.98	13.77	15.22 15.89
44	8.38	8.80	10.35	14.31	16.55
45	8.66	9.10	10.72	14.86	17.21

Table 4 - Form FL-08(U) Flexible Premium Adjustable Life Maximum Surrender Charge Premiums

Age Plus NT Nontobacco Tobacco Tobacco	acco
46 9.18 9.63 11.42 15.76 18.	23
47 9.70 10.16 12.12 16.67 19.	
48 10.23 10.69 12.81 17.57 20.	
49 10.75 11.22 13.51 18.48 21.	
50 11.28 11.75 14.21 19.38 22.	
51 11.80 12.28 14.91 20.28 23.	
52 12.33 12.81 15.61 21.19 24.	
53 12.85 13.34 16.30 22.09 25.	
54 13.38 13.87 17.00 23.00 26.	
55 13.90 14.40 17.70 23.90 27.	
56 14.66 15.31 18.71 25.52 28.	93
57 15.42 16.22 19.71 27.14 30.4	14
58 16.18 17.12 20.72 28.76 31.9	96
59 16.94 18.03 21.73 30.38 33.4	17
60 17.70 18.94 22.73 32.00 34.9	98
61 18.56 19.92 23.87 33.08 36.4	18
62 19.42 20.89 25.00 34.17 37.9	9
63 20.27 21.87 26.13 35.25 39.4	9
64 21.13 22.84 27.27 36.34 41.0	)Ò
65 21.99 23.82 28.40 37.42 42.5	0
66 23.20 25.23 30.30 39.58 44.7	
67 24.40 26.64 32.20 41.73 47.0	5
68 25.61 28.06 34.10 43.89 49.3	3
69 26.81 29.47 36.00 46.04 51.6	
70 28.02 30.88 37.90 48.20 53.8 71 29.36 32.56 40.05 50.38 56.4	
70.00 00.00 00.4	
72 30.69 34.24 42.20 52.55 59.0 73 32.03 35.92 44.36 54.73 61.5	
7.1	-
77.1	
70.00	
00.20 70.0	
70 40.50 50.00	
70.72	
70.50 05.2	
04.00	
81 62.30 67.43 74.42 84.35 91.47 82 66.90 72.12 78.72 88.56 95.60	
83 71.50 76.82 83.01 92.78 99.74	
84 76.10 81.51 87.31 96.99 103.8	
85 80.70 86.20 91.60 101.20 108.0	

# Table 5 - Form FL-08(U) Flexible Premium Adjustable Life Monthly Per \$1,000 of Specified Amount Charges

					~
Issue	Preferred	d Preferred	d	Preferred	
Age	Plus NT		Nontobacco	Tobacco	Tobacco
			HOMODACCO	TODACCO	<u>Tobacco</u>
0	0.321	0.321	0.321	0.224	0.204
1	0.321	0.321	0.321	0.321	0.321
2	0.321			0.321	0.321
		0.321	0.321	0.321	0.321
3	0.321	0.321	0.321	0.321	0.321
4	0.321	0.321	0.321	0.321	0.321
5	0.321	0.321	0.321	0.321	0.321
6	0.321	0.321	0.321	0.321	0.321
7	0.321	0.321	0.321	0.321	0.321
8	0.321	0.321	0.321	0.321	0.321
9	0.321	0.321	0.321	0.321	0.321
10	0.321	0.321	0.321	0.321	0.321
11	0.321	0.321	0.321	0.321	0.321
12	0.321	0.321	0.321	0.321	0.321
13	0.321	0.321	0.321	0.321	0.321
14	0,321	0.321	0.321	0.321	0.321
15	0.321	0.321	0.321	0.321	
16	0.321	0.321	0.321		0.321
17	0.321	0.321	0.321	0.321	0.321
18	0.321	0.321		0.321	0.321
19	0.321	0.321	0.321	0.321	0.321
20	0.321		0.321	0.321	0.321
21		0.303	0.303	0.320	0.321
22	0.301	0.303	0.303	0.320	0.321
	0.301	0.304	0.304	0.320	0.321
23	0.301	0.304	0.304	0.321	0.322
24	0.301	0.304	0.304	0.321	0.322
25	0.301	0.305	0.305	0.322	0.323
26	0.302	0.305	0.305	0.322	0.323
27	0.302	0.305	0.305	0.322	0.323
28	0.302	0.305	0.305	0.323	0.324
29	0.302	0.305	0.306	0.323	0.324
30	0.303	0.306	0.306	0.324	0.325
31	0,303	0.306	0.306	0.324	0.325
32	0.303	0.306	0.307	0.325	0.326
33	0.304	0.306	0.307	0.325	0.326
34	0.304	0.307	0.308	0.325	0.327
35	0.304	0.307	0.308	0.326	0.327
36	0.304	0.307	0.308	0.326	0.328
37	0.305	0.308	0.309	0.327	0.328
38	0.305	0.308	0.309	0.327	0.329
39	0.306	0.309	0.310	0.328	0.329
40	0.306	0.309	0.310	0.328	0.330
41	0.306	0.310	0.310	0.329	0.331
42	0.307	0.310	0.310	0.329	
43	0.307	0.311	0.311		0.331
44	0.308	0.311	0.311	0.329	0.332
45	0.308	0.311		0.330	0.332
-T-U	0.000	0.012	0.312	0.330	0.333

Table 5 - Form FL-08(U)
Flexible Premium Adjustable Life
Monthly Per \$1,000
of Specified Amount Charges

lass	D	Limba C :			-
Issue		Preferred		Preferred	
<u>Age</u>	<u>Plus NT</u>	NT	<u>Nontobacco</u>	<u>Tobacco</u>	<u>Tobacco</u>
46	0.308	0.312	0.242	0.004	
47	0.308	0.312	0.312	0.331	0.333
48	0.309	0.313	0.313 0.313	0.332	0.334
49	0.310	0.313	0.313	0.333	0.335
50	0.310	0.314		0.333	0.336
51	0.311	0.315	0.315	0.334	0.337
52	0.311	0.316	0.316	0.335	0.337
53	0.312	0.316	0.316	0.336	0.339
54	0.313	0.317	0.317	0.337	0.340
5 <del>5</del>	0.313	0.319	0.318	0.338	0.341
56	0.314		0.319	0.339	0.342
56 57	0.335	0.339 0.340	0.339	0.360	0.371
57 58	0.336		0.340	0.361	0.373
59	0.337	0.341	0.341	0.363	0.374
60	0.338	0.342	0.342	0.363	0.375
61		0.343	0.344	0.365	0.377
62	0.339	0.344	0.345	0.366	0.378
63	0.340	0.345	0.347	0.368	0.380
63 64	0.341	0.347	0.348	0.370	0.383
	0.343	0.348	0.350	0.372	0.385
√65	0.345	0.350	0.351	0.375	0.387
66	0.346	0.352	0.361	0.377	0.390
67	0.348	0.354	0.364	0.379	0.393
68	0.351	0.357	0.367	0.383	0.397
69	0.354	0.360	0.370	0.387	0.401
70	0.357	0.363	0.373	0.391	0.405
71	0.360	0.366	0.378	0.395	0.411
72	0.364	0.371	0.383	0.402	0.418
73	0.369	0.377	0.389	0.409	0.427
74	0.377	0.384	0.398	0.419	0.437
75 70	0.386	0.394	0.408	0.432	0.452
76	0.399	0.408	0.424	0.450	0.472
77	0.419	0.430	0.449	0.478	0.504
78 	0.459	0.473	0.496	0.534	0.566
79	0.569	0.591	0.628	0.688	0.739
80	0.680	0.710	0.760	0.841	0.913
81	0.789	0.828	0.893	0.995	1.085
82	0.900	0.947	1.025	1.150	1.259
83	1.010	1.065	1.157	1.304	1.431
84	1.121	1.184	1.289	1.458	1.605
85	1.231	1.303	1.421	1.611	1.778

## Statutory Reserves Form FL-08(U)

Because the No-Lapse guarantee is embedded in the policy, the reserves will be the greater of the reserve calculated under the Commissioner's Reserve Valuation Method (CRVM) for Indexed Flexible Premium Adjustable Life and the reserve calculated using Actuarial Guideline XXXVIII (AG38) methodology. The description and demonstration of the AG38 reserve can be found in the attachment to this memorandum.

The following items will be calculated at time of policy issue.

Guaranteed Maturity Premium (GMP) - The GMP is the level annual gross premium paid to age 121, which will endow the policy at age 121. The GMP is calculated based on the underwriting classification, plan of insurance purchased and policy guarantees including expense charges, interest rates and mortality charges.

<u>Guaranteed Maturity Fund</u> (GMF) - The GMF is an accumulation fund value defined for each duration using guaranteed expense charges, interest rates and mortality charges, and assuming the GMP's are paid.

Future Benefits (FB) - The FB are the Death Benefits associated with each of the GMF values, defined for all policy durations. These Future Benefits are based on the Death Benefit Option (Specified Amount includes Policy Value or Specified Amount does not include Policy Value) and the percentage of Policy Value factors in Section 9 of Form FL-08(U), if applicable.

<u>Present Value of Future Benefits</u> (PVFB $_{\rm I}$ ) - The PVFB at issue is the value of the future benefits, discounted for interest and mortality that correspond to the valuation basis for the year of issue. The mortality used is based on the 2001 CSO (M) Preferred Class Structure Mortality Table, Age Nearest Birthday.

$$PVFB_{I} = \underbrace{\frac{1 \times 1 - x}{1 \times 1 \times 1}}_{l_{x} t=1} [\underbrace{(l_{x+t-1} - l_{x+t}) * FB_{t}}_{t}]$$

$$t$$

$$11 (1+i_{k})$$

$$k=1$$

where:

x = issue age

 $l_{x+t}$ = number of lives at age x+t using valuation mortality

 $i_k$ = valuation interest rate for duration k

SA = Specified Amount at issue

 $\underline{CRVM}$  Expense Allowance ( $\underline{E}^{CRVM}$ ) - The  $\underline{E}^{CRVM}$  is equal to (a)-(b) where:

(a) is (i) the net level annual premium for the contract as if issued at an age one year older with premiums payable one year less and maturing at the same age, but not greater than (ii) a net level annual premium for a 19 pay whole life contract issued at an age one year older.

$$(i) \xrightarrow{\geq} FB_{j+2} * v^{j+1} * j p_{x+1} * q_{x+j+1} + FB_{(121-x)} * v^{(121-x)-1} * 121-x-1 p_{x+1}$$

$$\downarrow j=0$$

$$(121-x)-2$$

$$\downarrow v^{j} * j p_{x+1}$$

$$\downarrow j=0$$

### (ii) ELRA \* $_{19}P_{X+1}$

where, ELRA is the Equivalent Level Renewal Amount

ELRA= 
$$(121-x)-2$$

$$= \sum_{j=0}^{FB_{j+2}} FB_{j+2} * v^{j+1} * jp_{x+1} * q_{x+j+1}$$

$$= A_{x+1}$$

and,

$$19^{P}x+1=A_{X+1}/A_{X+1:19}$$

(b) is the net one year term insurance premium for the benefit provided in the first year.

The following items will be calculated at each valuation date.

 $\underline{\text{Cash Value}}$  (CV<sub>m</sub>) - The CV<sub>m</sub> is the accumulated fund value of the policy, at the time of valuation.

Net Surrender Value (CSV $_{m}$ ) - The CSV $_{m}$  is the cash value of the policy less the surrender charge, if any, at the time of valuation.

Ratio (r) - equals CVm divided by GMFm.

If the ratio r is less than zero or greater than one, then it should be set equal to one.

Future Benefits (FB) - Using the greater of  $CV_{\mathfrak{m}}$  or  $GMF_{\mathfrak{m}}$  as a starting value on the valuation date, future benefits are calculated assuming guaranteed interest, mortality and expense charges, with GMP's paid on the policy anniversaries.

<u>Present Value of Future Benefits</u> ( $PVFB_m$ ) - The PVFB at the time of valuation is the value of the Future Benefits, discounted for interest and mortality using the valuation basis.

Net Level Premium Reserves (NLR $_{m}$ ) - The net level premium reserves are equal to ((A) - (B)) \* r where:

- (A) is PVFB<sub>m</sub>
- (B) is PVNLP = NLP \*  $a_{X+M}$ where NLP = PVFB<sub>I</sub> /  $a_{X}$

r is the ratio defined above.

CRVM Reserve (CRVMm) - The CRVM at time of valuation m is defined as follows:

$$CRVM_{m} = NLR_{m} - (E^{CRVM} * a_{\underline{X}+\underline{m}} * r)$$

### STATUTORY RESERVES FORM FL-08(U) SAMPLE CALCULATION

Age 35, Nonsmoker \$100,000 Specified Amount Issue Date = 5/1/08

Guaranteed Maturity Premium (GMP) = 1,651.80

Guaranteed Maturity Fund (GMF) - see attached Table

Future Benefits (FB) - see attached Table

Present Value of Future Benefits (PVFB $_{\rm I}$ ) - using 4% interest and the 2001 CSO (M) Preferred Class Structure Mortality Table, the PVFB $_{\rm T}$  = 20,801.85

CRVM Expense Allowance (ECRVM) -

(a) (i) the net level annual premium issued one year older = \$1,053.62

(ii) ELRA \* 
$$_{19}P_{X+1} = $1,602.81$$

ELRA =\$100,000

$$_{19}P_{x+1} = .016028$$

(b) is the net one year term insurance premium

$$FB_1 * A_{x:1} = $56.78$$

$$FB_1 = 100,000$$

$$A_{x:1} = .0005678$$

$$E^{CRVM} = (a) - (b) = 1,053.62 - 56.78 = 996.84$$

Using a valuation date of 12/31/08, m=8.

Cash Value ( $CV_m$ ) - Assuming an actual premium of \$1,651.80, actual interest credited at 3%, and current cost of insurance rates,  $CV_m$  = \$1,344.17.

Net Surrender Value = 710.57

Ratio (r) - CV<sub>m</sub> / GMF<sub>m</sub>

$$GMF_{m} = 1,040.29$$

$$r = 1,344.17/1,040.29 > 1$$
, therefore  $r = 1.00$ 

Present Value of Future Benefits (PVFBm) -

 $PVFB_8 = 21,402.04$ 

Net Level Premium Reserves (NLRm) -

$$(\cdot(A) - (B)) * r$$

- (A) is  $PVFB_8 = 21,402.04$
- (B) is PVNLP = NLP \*  $a_{x+m}$

where NLP = PVFB<sub>I</sub> /  $a_X$ = 20,801.85/20.69 = 1,005.44

 $a_{X+m} = 20.22$ 

PVNLP = 1,005.44 \* 20.22 = 20,328.72

NLRm = (21,402.04 - 20,328.72) \* 1.00 = 1,073.32

CRVM Reserve (CRVMm) -

 $CRVM_m = NLR_m - (E^{CRVM} * a_{X+m} * r)$  = 1,073.32 - 996.84 \* 20.22/20.69 \* 1.00 = 99.16

AG38 Reserve  $(tTV_{[x]} \text{ from Attachment}) = 2,585.20$ 

 $\underline{\text{Statutory Reserve}} \ = \ \text{MAX} \ \ (\text{CSV}_{\text{m}}, \text{CRVM}_{\text{m}}, \ t\text{TV}_{[x]}) \ = \ \text{MAX} \ \ (710.57, 99.16, \ 2,585.20) \ = \ 2,585.20$ 

Age 35 NonSmoker
Guaranteed Interest = 3%
Guaranteed COI = 2001 CSO (80) NonSmoker
Specified Amount = \$100,000 (includes Policy Value)

Form FL-08(U)

GMP = \$1,651.80

<u>Duration</u>	<u>GMF</u>	FB		<u>Duration</u>	GMF	<u>FB</u>
. 1	856	100,000		44	67,244	100,000
2	1,732	100,000		45	68,830	100,000
3	2,630	100,000		46	70,367	100,000
4	3,547	100,000		47	71,839	100,000
5	4,487	100,000		48	73,252	100,000
6	5,448	100,000		49	74,610	100,000
. 7	6,428	100,000		50	75,908	100,000
8	7,427	100,000		51	77,140	100,000
9	8,443	100,000		52	78,308	100,000
10	9,475	100,000		53	79,393	100,000
11	10,896	100,000		54	80,396	100,000
12	12,346	100,000		55	81,318	100,000
13	13,821	100,000		56	82,171	100,000
14	15,331	100,000		57	83,012	100,000
15	16,876	100,000		58	83,832	100,000
16	18,453	100,000		59	84,613	100,000
17	20,059	100,000		60	85,340	100,000
18	21,690	100,000		61	85,984	100,000
19	23,346	100,000		62	86,565	100,000
20	25,021	100,000		63	87,067	100,000
21	26,710	100,000		64	87,607	100,000
22	28,416	100,000		65	88,152	100,000
23	30,136	100,000		66	88,674	100,000
24	31,879	100,000		67	89,196	100,000
25	33,643	100,000		68	89,712	100,000
26	35,424	100,000		69	90,217	100,000
27	37,214	100,000		70	90,702	100,000
28	39,007	100,000		71	91,156	100,000
29	40,798	100,000		72	91,581	100,000
30	42,588	100,000		73	91,976	100,000
31	44,378	100,000		74	92,344	100,000
32	46,171	100,000		75	92,683	100,000
33	47,971	100,000	•	76	92,991	100,000
34	49,775	100,000		77	93,275	100,000
35	51,589	100,000		78	93,546	100,000
36 27	53,402	100,000		79	93,831	100,000
37	55,212	100,000		80	94,092	100,000
38	56,997	100,000		81	94,353	100,000
39	58,761	100,000		82	94,632	100,000
40	60,506	100,000		83	94,968	100,000
41	62,230	100,000		84	95,517	100,000
42	63,934	100,000		85	96,791	100,000
43	65,609	100,000		86	100,000	100,000

### Description

Actuarial Guideline XXXVIII describes a nine step process to calculate the reserves on a universal life policy that guarantees the coverage to remain in force as long as the accumulation of premiums paid satisfy the secondary guarantee requirement.

The first step requires a calculation of the minimum premiums that will satisfy the secondary guarantee requirement. The second step states that the specified premiums used for basic and deficiency reserve calculation be the minimum gross premiums derived in the first step. Basic and deficiency reserves are then calculated as instructed in the Valuation of Life Insurance Policies Model Regulation. Additionally, for purposes of applying Sections 7B and 7C of the Model, a lapse rate as described in AGXXXVIII may be used.

Step three states that a determination should be made of the amount of actual premium payments in excess of the minimum gross premiums, which is the amount of the shadow account. Step four requires a determination of the minimum amount of the shadow account required to fully fund the guarantee. The amount determined above for this step is to then be divided by one minus a seven percent premium load allowance (0.93). A funding ratio is then calculated by dividing the amount calculated in step 3 by the amount calculated in step 4, with the resulting ratio capped at 1.

In step five the net single premium on the valuation date is computed, using any valuation table and select factors authorized in section 5A of the Valuation of Life Insurance Policies Model Regulation. A lapse rate subject to the same criteria as in step 2 above may be used. The net single premium is calculated for the coverage provided by the secondary guarantee for the remainder of the secondary guarantee period. Step six determines the "net amount of additional premiums" by multiplying the funding ratio from step four by the difference between the net single premium in step five and the basic and deficiency reserves calculated in step two.

Step seven calculates a "reduced deficiency reserve" by multiplying the deficiency reserve by one minus the funding ratio calculated in step 4, but not less than zero. Step eight calculates the actual reserve to be used as the lesser of: (1) the net single premium from step five, (2) the amount of excess from step six plus the basic and deficiency reserves calculated in step two. This amount is reduced by any applicable surrender charges. If the resulting amount is less than the sum of the basic and deficiency reserve from step two, then the basic and deficiency reserves to be used are those calculated in step two. Step nine determines an "increased basic reserve" by subtracting the "reduced deficiency reserve" in step seven from the reserve calculated in step eight.

### **Definitions and Notation**

Secondary Guarantee Period (n) – the period for which policyholder can maintain the policy in force due to the provisions of the secondary guarantee.

Minimum Gross Premium (GP) – the minimum premium to keep the secondary guarantee in force. This amount is calculated as the minimum premium that can be paid at the beginning of the policy year to keep the guarantee in force at the end of the year.

<u>Present Value of Future Benefits (PVFB)</u> – Value of future benefits discounted for interest and mortality and lapses. For Basic Reserves, PVFB is determined using an interest rate of 4% and Basic mortality. For Minimum reserves, PVFB is determined using an interest rate of 4% and Minimum Mortality. The maximum lapses allowed are used in the present value calculation.

Present Value of Future Premiums (PVNP) — Value of future net premiums discounted for interest and survivorship (including lapses). For Basic reserves, PVNP is determined using the net premiums for each segment, 4% interest, and Basic Mortality. For Minimum Reserves, PVNP is determined using the lower of the secondary guarantee specified premium and the net premium for each segment, 4% interest, and Minimum Mortality. Net Premium equals GP times the K factor for the segment. The maximum lapses allowed are used.

CRVM Expense Allowance (ECRVM) - Excess of net level annual premium issued one year older over the one-year term premium.

Basic Mortality - is defined as 2001 CSO (M) Preferred Class Structure Select and Ultimate Mortality. Select factors may only be applied during the first segment.

Minimum Mortality - is defined as 2001 CSO (M) Preferred Class Structure S & U Mortality and company-developed X-factors. Select factors and X-factors may only be applied during the first segment.

Terminal Reserve  $(tV_{[X]})$  - present value of all future guaranteed death benefits (PVFB) minus the present value of all future net premiums (PVNP). For basic reserves this value is calculated using valuation interest and basic mortality. For minimum reserves this value is calculated using minimum interest and minimum mortality. The maximum lapses allowed are used in the present value calculations.

<u>Deficiency Reserve ( $_{1}DV_{[x]}$ )</u> – A policy is deficient if the gross specified premium is less than the net premium. Any duration where this is true, the gross premium must be substituted for the net premium in the minimum reserve calculation. Any excess of minimum reserve over the basic reserve must be held as a deficiency reserve.

Mean Basic Reserve  $(MV_{[x]})$  — Mean reserve in year t is equal to the weighted average of the initial and terminal reserve for year t. Initial reserve is the prior year terminal reserve plus the net premium.

Excess (EX) – The amount in the shadow account. This will be equal to the sum of any paid premiums minus the shadow account charges accumulated with interest.

Single Pay Excess (SP) - The amount in the shadow account necessary to fully fund the secondary guarantee at the valuation date.

Net Single Premium (NSP) — The net single premium on the valuation date for the coverage provided by the secondary guarantee for the remainder of the secondary guarantee period using basic mortality. The maximum lapses allowed are used in the NSP calculation.

Total AG38 Reserve  $(tTV_{[x]})$  = The total reserve held, which is the lesser of: (1) the net single premium from step five, (2) the amount of excess from step six plus the basic and deficiency reserves calculated in step two. This amount is reduced by any applicable surrender charges. If the resulting amount is less than the sum of the basic and deficiency reserve from step two, then the basic and deficiency reserves to be used are those calculated in step two.

<u>Surrender Charge (SC)</u> = The policy surrender charge applicable to the base policy's account value.

### **Formulas**

PVGP<sup>seg</sup> = Present value of gross premiums during segment as of beginning of a segment

$$= \sum_{t=1 \text{ to } j} GP_{[x]+k+t,1} * v^{t-1} * {}_{t-1}p_{[x]+k}$$

PVFB<sup>seg</sup> = Present value of death benefits during segment as of beginning of a segment

$$= \sum_{t=1}^{\infty} face_{t+k} * v^{t} * q_{[x]+k+t-1} * f_{t-1}p_{[x]+k}$$

$$E^{CRVM} = \frac{\sum_{t=2 \text{ to } j} Face_t^* \ v^t * q_{[x]^{+t-1}} *_{t-1} p_{[x]} * GP_{[x]} - Face_1 * v * q_{[x]} *_i / ln(1+i)}{\sum_{t=2 \text{ to } j} GP_{[x]^{+t-1}} *_{v^{t-1}} *_{t-1} p_{[x]}}$$

$$K = (PVFB^{seg} + E^{CRVM}) / PVGP^{seg}$$

PVNP = Present value of net premiums

$$= \sum_{t=1 \text{ to } j} K_{k+t+r} * GP_{[x]+k+t-1} * v^{t-1} *_{t-1} p_{[x]+k}.$$

$$_{t}V_{[x]+k} = PVFB(t) - PVNP(t)$$

$$= \sum_{r=1 \text{ to } n-k-t} Face_{k+t+r} * v^r * {}_{r-1}p_{[x]+k+t} * q_{[x]+k+t+r-1} - K_{k+t+r} * GP_{[x]+k+t+r-1} * v^{r-1} * {}_{r-1}p_{[x]+k+t}$$

where:

 $p_{[x]}$  includes applicable mortality and lapses

x = issue age of insured

n = secondary guarantee period

j = length of current segment

k = number of years from issue to beginning of segment

t = number of years from beginning of current segment

v = 1 / (1+i)

i = valuation interest rate

 $Face_{k+t} = Death Benefit in year k+t$ 

### Sample Calculation

Insured:

Age 35, Nonsmoker

Specified Amount:

\$100,000

Target Premium:

\$704

Issue Date

05/01/2008

Valuation Date:

12/31/2008

### **Basic Reserve**

I = 4.0% for basic

Since the gross premiums increase at a rate less than the increase of the mortality, there is only one segment of length 86 years.

n = 86 years

 $\mathbf{k} = \mathbf{0}$ 

PVFB = Present Value of future benefits at the start of the segment

= 20,831.50

PVGP = Present value of gross premiums at the start of the segment

= 16,921.93

 $E^{CRVM} = PVFB(t+1)/PVGP(t+1) * GP - Face * (1/(1+I)) * q_{[55]} * i / ln(1+i)$ 

= 21,618.15 / 17,504.96 \* 100.00 - 100,000 \* (1/(1+.04)) \* .00058 \* .04 / ln(1.04)

=66.62 in year 1 only

K = (20,831.50 + 66.62)/16,921.93

= 1.2350

NP = Net Premium =  $GP * K - E^{CRVM}$ 

= 100.00\*1.2350 - 66.62 = 56.88 in year 1

 $_{1}V_{[55]} = PVDB(1) - PVNP(1)$ 

= 20,898.12 - 20,898.12 = 0

 $_{1}MV_{[55]} = \underline{(12-m)} * (_{0}V_{[55]} + NP_{1}) + \underline{m} * _{1}V_{[55]}$ 

Since Valuation date is 8 months past issue date m = 8.

= .33 \* (0 + 56.88) + .67\*0

### Minimum Reserve

I = 4% for minimum reserves

Since the gross premiums increase at a rate less than the increase of the mortality, there is only one segment of length 86 years.

$$n' = 86 \text{ years}$$

$$k = 0$$

$$= 23,680.71$$

$$E^{CRVM}$$
 = PVDB(t+1)/PVGP(t+1) \* GP - Face \* (1/(1+I)) \*  $q_{[55]}$  \* i / ln(1+i)

$$= 16,798.57 / 24,531.19*100.00 - 100,000 * (1/(1+.04)) * .0002958 * .04 / ln(1.04)$$

$$= 39.47$$
 in year 1 only

$$K = (16,176.70 + 39.47)/23,680.71$$

$$=.6848$$

NP = Net Premium = 
$$GP * K - E^{CRVM}$$

= 
$$100.00*.6848 + 39.47 = 29.01$$
 in year 1

$$_{1}V_{[55]}$$
: = PVDB(1) - PVNP(1)

$$= 16,216.17 - 16,216.17 = 0$$

$$= (12-m) * (_{0}V_{[55]} + NP_{1}) + m * _{1}V_{[55]}$$

Since Valuation date is 8 months past issue date m = 8.

$$= .33 * (0 + 29.01) + .67 * 0$$

$$= 9.67$$

### **Deficiency Reserve**

$$_{1}DV_{[55]} = MAX(0, 9.67 - 18.96)$$

$$= 0$$

### **Actuarial Guideline XXXVIII Reserve**

$$EX = 1,573.89$$

$$SP = 9,550.83$$

$$SC = 633.60$$

Funding ratio = EX/(SP/0.93) = 1,573.89 / (9,550.83/0.93) = .1533

NSP = 20,898.12

 $_{t}DV_{[55]} = 0 * (1-Funding ratio) = 0 * (1-.1533) = 0$ 

 ${}_{1}TV_{[55]} = MAX({}_{1}MV_{[55]} + {}_{L}DV_{[55]}, MIN(NSP, {}_{1}MV_{[55]} + {}_{L}DV_{[55]} + [Funding \ ratio* \ (NSP - {}_{1}MV_{[55]} - {}_{L}DV_{[55]} - ] - SC)) = MAX(18.96 + 0, MIN[20,898.12 , 18.96 + .1533* (20,898.12 - 18.96 - 0) - 633.60])$ 

= MAX(18.96, MIN(20,898.12, 2,585.20)) = 2,585.20

This reserve would then be compared to the cash surrender value and the CRVM UL model regulation reserve to determine the final statutory reserve. The final reserve held would be equal to the maximum of the cash surrender value, the CRVM reserve, and the Actuarial Guideline XXXVIII reserve calculated above.

# THE PENN MUTUAL LIFE INSURANCE COMPANY ACTUARIAL MEMORANDUM

### Rider - Overloan Protection Benefit Agreement Form OPBA-08

### I. General Description

This rider will prevent your policy from lapsing when, on any Monthly Anniversary, the outstanding indebtedness on the policy equals or exceeds (a) multiplied by (b), where:

- (a) is the Cash Surrender Value minus the Monthly Deduction from the previous Monthly Anniversary;
- (b) is the Specified Loan Percentage shown on the Policy Specifications Page.

If the above occurs, the Policy will automatically become paid-up life insurance. The new Specified Amount of the Policy will be equal to the Policy Value, adjusted for a one-time Charge, multiplied by an attained age factor shown in the Table of Death Benefit Factors.

The rider benefit is subject to the following conditions:

- (a) The Insured's attained age is 75 or older;
- (b) The Policy has been in force for a minimum of 15 years; and
- (c) The amounts that may be withdrawn from the policy without imposition of federal income tax must be taken as partial surrenders.

When the rider benefit is exercised, the new Death Benefit upon the date of death of the insured will be the greater of (a) or (b), where:

- (a) is the new Specified Amount of the paid-up life insurance; or
- (b) is the appropriate attained age factor shown in the Table of Death Benefit Factors multiplied by the greater of the Policy Value or outstanding indebtedness.

### II. Rider Costs

There is a one-time charge for this rider assessed at the time when the benefit is exercised. This charge is shown on the Policy Specifications page.

### III. Cash Values

None.

### IV. Reserves

When the rider benefit is exercised, the statutory reserves for the policy will be the greater of (a) or (b), where:

- (a) is the Policy Value; and
- (b) is the net single premium for the Death Benefit as defined above using the valuation basis as described in the base policy.

Andrew W. Martin, FSA, MAAA

Associate Actuary

# Illustrative Values Calculation for Form FL-08(S)

Years 1 and 15

Male Age 35; Standard Nontobacco Specified Amount of \$50,000

Duration at Start of Illustration = 0

Issue Date = 7/1/08

Cash Surrender Value (11)	415.18313 387.98288 360.71307 333.37353 305.96406 278.48451 250.93467 223.31439 195.62347 167.86173 140.02900	8640.45243 8642.09532 8643.74269 8645.39455 8647.05091 8648.71178 8650.37718 8653.72159 8655.40064 8657.08426 8658.77246
Surrender Charge (10)	328.50 328.50 328.50 328.50 328.50 328.50 328.50 328.50 328.50 328.50 328.50	80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80.00 80
End of Mo. Policy Value (9)	743.68313 716.48288 689.21307 661.87353 634.46406 606.98451 579.43467 551.81439 524.12347 496.36173 468.52900	7868.00 8640.45243 8642.09532 8643.74269 8645.39455 8647.05091 8650.37718 8650.37718 8652.04711 8655.40064 8655.7246
Interest Factor (8)	1.00247 1.00247 1.00247 1.00247 1.00247 1.00247 1.00247 1.00247 1.00247 1.00247	1.00247 1.00247 1.00247 1.00247 1.00247 1.00247 1.00247 1.00247 1.00247
Begin of Mo. Policy Value (after mo. deductions) (7)	741.85352 714.72019 687.51747 660.24519 632.90315 605.49120 578.00915 550.45681 522.83402 495.14058 467.37633	8619.19517 8620.83402 8622.47734 8624.12513 8625.77742 8627.43420 8630.76132 8632.43169 8634.10660 8635.78608
Monthly Expense Charges (6)	24 24 24 24 24 24 24 24 24 24 24 24 24 2	000000000000000000000000000000000000000
Base Cost of Insurance (5)	4,46048 4,46294 4,46541 4,4789 4,47286 4,47536 4,47536 4,4786 4,48037 4,48037 4,4829 4,48794	10.61883 10.61841 10.61799 10.61774 10.61678 10.61628 10.61628 10.61628 10.61499 10.61499
Amount at Risk (4)	49106.17589 4913.30675 49160.50700 49187.77681 49215.11636 49242.52582 49270.00538 49297.55521 49325.17550 49352.86642 49360.62815	41238.17589 41236.53746 41234.89456 41231.59534 41229.93898 41229.93898 41228.27811 41226.61271 41224.94278 41221.58925 412119.90563
Begin of Mo. Policy Value (before mo. deductions)	770.81400 743.68313 716.48288 689.21307 661.87353 634.46406 606.98451 579.43467 551.81439 524.12347 496.36173	8638.81400 8640.45243 8642.09532 8643.74269 8645.39455 8647.05091 8648.71178 8650.37718 8652.04711 8653.72159 8655.40064
Premium Load (2)	136.0260 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	136.0260 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000
Premium (1)	8.000 0.00 0.00 0.00 0.00 0.00 0.00 0.0	906.84 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0
Month	Jul Aug Sep Oct Nov Dec Jan Mar Apr May	Jul Aug Sep Oct Nov Dec Jan Mar Mar Jun

 $<sup>(2)=.15^{*}(1)</sup>$  in all years (3)=(8)+(1)-(2)

<sup>(4)=(50000/1.00247)-(3)</sup> (5)=(.00109/12)\*(4) or (.00309/12)\*(4) year 1

<sup>(6)=9.00+.310\*50000/1000 (</sup>yr. 1) or 9.00 (yr. 15) (7)=(3)-(5)-(6) (8)=(1.03)\*\*(1/12) (9)=(8)\*(7) (10)=-9\*Target Premium (10)=-9\*Target Premium (11)=maximum (19)-(10);0}

### The Penn Mutual Life Insurance Company Form FL-08(S) Flexible Premium Adjustable Life Insurance Comparison Of Legal Minimum Cash Value to Form FL-08(S) Cash Surrender Value

### Male Issue Age 35 Standard Nontobacco Annual Premium of \$906.84 Specified Amount of \$50,000 Includes Policy Value

Age         Benefit         Reserve         Value         Benefit         Reserve         Value           36         50.000         0         0         50.000         596         5           37         50.000         512         0         50.000         596         5           38         50.000         1,577         155         50.000         1,578         1,5           40         50.000         2,702         1,002         50,000         2,702         2,6           41         50.000         3,290         1,452         50,000         3,290         3,1           43         50,000         3,896         1,920         50,000         3,896         3,6           44         50,000         3,896         1,920         50,000         3,896         3,6           44         50,000         5,160         2,906         50,000         5,816         5,5           47         50,000         5,816         3,424         50,000         5,816         5,5           48         50,000         7,871         4,503         50,000         7,871         7,0           48         50,000         7,871         5,083         5		•	Legal Minimu	m		Policy Actual	
37         50,000         512         0         50,000         1,082         1,0           38         50,000         1,037         0         50,000         1,082         1,0           39         50,000         1,577         155         50,000         2,131         2,0           40         50,000         2,131         570         50,000         2,702         2,6           42         50,000         3,290         1,452         50,000         3,290         3,1           43         50,000         3,896         1,920         50,000         3,290         3,1           44         50,000         4,519         2,404         50,000         4,519         4,2           45         50,000         5,816         3,424         50,000         5,816         5,5           47         50,000         6,487         3,959         50,000         7,171         7,00           48         50,000         7,871         5,083         50,000         7,871         7,0           49         50,000         7,871         5,083         50,000         7,871         7,0           50         50,000         10,76         6,940 <td< th=""><th></th><th></th><th>Resèrve</th><th></th><th></th><th>Reserve</th><th>Cash Surrender Value</th></td<>			Resèrve			Reserve	Cash Surrender Value
37         50,000         512         0         50,000         1,082         1,0           38         50,000         1,037         0         50,000         1,082         1,0           39         50,000         1,577         155         50,000         2,131         2,0           40         50,000         2,131         570         50,000         2,702         2,6           42         50,000         3,290         1,452         50,000         3,290         3,1           43         50,000         3,896         1,920         50,000         3,290         3,1           44         50,000         4,519         2,404         50,000         4,519         4,2           45         50,000         5,816         3,424         50,000         5,816         5,5           47         50,000         6,487         3,959         50,000         6,487         6,22           48         50,000         7,871         4,512         50,000         7,871         7,00           49         50,000         7,871         5,678         50,000         7,871         7,8           50         50,000         10,76         6,940 <t< td=""><td>36</td><td>50,000</td><td>- 0</td><td>0</td><td>50,000</td><td>440</td><td></td></t<>	36	50,000	- 0	0	50,000	440	
38         50,000         1,037         0         50,000         1,082         1,082           39         50,000         1,577         155         50,000         1,578         1,5           40         50,000         2,131         570         50,000         2,131         2,0           41         50,000         3,290         1,452         50,000         3,290         3,1           43         50,000         3,896         1,920         50,000         3,896         3,8           44         50,000         4,519         2,404         50,000         3,896         3,6           45         50,000         5,160         2,906         50,000         3,896         3,6           46         50,000         5,816         3,424         50,000         5,816         5,5           47         50,000         6,487         3,959         50,000         6,487         6,22           48         50,000         7,871         4,512         50,000         7,871         7,8           50,000         7,871         5,083         50,000         7,871         7,8           51         50,000         10,076         6,940         50,000 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>113</td>							113
39         50,000         1,577         155         50,000         1,578         1,5           40         50,000         2,131         570         50,000         2,131         2,0           41         50,000         2,702         1,002         50,000         3,290         3,1           42         50,000         3,290         1,452         50,000         3,896         3,6           43         50,000         4,519         2,404         50,000         4,519         4,2           45         50,000         5,160         2,906         50,000         4,519         4,2           45         50,000         5,160         2,906         50,000         5,160         4,7           46         50,000         5,816         3,424         50,000         5,816         5,24           47         50,000         6,487         3,999         50,000         7,171         7,00           48         50,000         7,871         5,083         50,000         7,871         7,0           49         50,000         7,871         5,083         50,000         7,871         7,0           50         50,000         1,676         6,940							596
40 50,000 2,131 570 50,000 1,136 1,20 41 50,000 2,702 1,002 50,000 2,702 2,6 42 50,000 3,290 1,452 50,000 3,290 3,1 43 50,000 3,896 1,920 50,000 3,896 3,6 44 50,000 4,519 2,404 50,000 4,519 4,2 45 50,000 5,160 2,906 50,000 5,160 4,7 46 50,000 5,160 3,999 50,000 6,487 6,2 47 50,000 7,171 4,512 50,000 7,171 7,00 48 50,000 7,871 5,083 50,000 7,871 7,00 49 50,000 8,587 5,678 50,000 8,659 8,66 51 50,000 10,076 6,940 50,000 10,290 10,25 53 50,000 10,076 6,940 50,000 11,127 11,12 55 50,000 11,638 8,292 50,000 11,977 11,97 55 50,000 11,403 10,462 50,000 11,977 11,97 57 50,000 13,266 9,723 50,000 14,578 14,57 58 50,000 14,103 10,462 50,000 15,460 15,46 59 50,000 16,707 12,784 50,000 17,260 17,266 61 50,000 17,595 13,599 50,000 18,174 18,17 62 50,000 16,707 12,784 50,000 17,260 17,260 61 50,000 22,094 17,874 50,000 22,748 22,744 67 50,000 23,914 19,646 50,000 22,748 22,744 67 50,000 22,094 17,874 50,000 22,748 22,748 67 50,000 23,914 19,646 50,000 22,748 22,744 67 50,000 23,914 19,646 50,000 24,574 20,92 65 50,000 23,914 19,646 50,000 24,574 20,92 67 50,000 24,833 20,552 50,000 27,334 23,346 67 50,000 23,914 19,646 50,000 24,574 20,92 67 50,000 24,833 20,552 50,000 27,334 27,344 50,000 28,550 24,313 50,000 27,334 27,344 50,000 29,460 25,267 50,000 30,053 30,053 76 50,000 31,251 27,170 50,000 30,003 31,809 31,809 76 50,000 31,251 27,170 50,000 32,670 32,670							1,082
42 50,000 3,290 1,452 50,000 3,290 3,1 43 50,000 3,896 1,920 50,000 3,896 3,6 44 50,000 4,519 2,404 50,000 5,160 4,7 45 50,000 5,160 2,906 50,000 5,160 4,7 46 50,000 6,487 3,959 50,000 6,487 6,2 47 50,000 6,487 3,959 50,000 7,171 7,0 48 50,000 7,171 4,512 50,000 7,171 7,0 49 50,000 7,871 5,083 50,000 7,871 7,8 50 50,000 8,587 5,678 50,000 8,659 8,65 51 50,000 10,076 6,940 50,000 10,290 10,25 52 50,000 10,076 6,940 50,000 11,127 11,12 54 50,000 11,638 8,292 50,000 11,177 11,97 55 50,000 12,444 8,998 50,000 12,836 12,83 56 50,000 13,266 9,723 50,000 12,836 12,83 57 50,000 14,103 10,462 50,000 14,578 14,57 58 50,000 14,955 11,218 50,000 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,460 15,4		•	•			•	1,578 2,085
42 50,000 3,290 1,452 50,000 3,290 3,1 43 50,000 3,896 1,920 50,000 3,896 3,6 44 50,000 4,519 2,404 50,000 4,519 4,2 45 50,000 5,160 2,906 50,000 5,160 4,7 46 50,000 5,816 3,424 50,000 5,816 5,5 47 50,000 6,487 3,959 50,000 6,487 6,2 48 50,000 7,171 4,512 50,000 7,171 7,00 49 50,000 7,871 5,083 50,000 7,871 7,8 50 50,000 8,587 5,678 50,000 8,659 8,63 51 50,000 10,076 6,940 50,000 10,290 10,25 52 50,000 10,076 6,940 50,000 11,977 11,17 54 50,000 11,638 8,292 50,000 11,977 11,17 55 50,000 12,444 8,998 50,000 12,836 12,83 56 50,000 13,266 9,723 50,000 13,703 13,703 57 50,000 14,103 10,462 50,000 15,460 15,460 59,600 50,000 16,354 16,35 58 50,000 14,955 11,218 50,000 17,260 17,260 17,260 15,460 15,460 50,000 16,354 16,35 50 50,000 18,491 14,432 50,000 17,260 17,260 17,260 17,260 17,260 17,260 17,260 17,260 17,260 17,260 17,260 17,260 17,260 17,260 17,260 17,260 17,261 17,27 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 11,197 1	41	50,000	2,702	1,002	50,000	2 702	2,603
43 50,000 3,896 1,920 50,000 3,896 3,6 44 50,000 4,519 2,404 50,000 4,519 4,2 45 50,000 5,160 2,906 50,000 5,160 4,7 46 50,000 5,160 2,906 50,000 5,160 4,7 47 50,000 6,487 3,959 50,000 6,487 6,2 48 50,000 7,171 4,512 50,000 7,171 7,00 49 50,000 7,871 5,083 50,000 7,871 7,8 50 50,000 9,322 6,297 50,000 9,466 9,46 52 50,000 10,076 6,940 50,000 10,290 10,25 53 50,000 10,849 7,606 50,000 11,127 11,12 54 50,000 11,638 8,292 50,000 11,127 11,12 55 50,000 11,638 8,292 50,000 11,977 11,97 55 50,000 12,444 8,998 50,000 12,836 12,83 56 50,000 14,103 10,462 50,000 14,578 14,57 58 50,000 14,955 11,218 50,000 15,460 15,46 60 50,000 16,707 12,784 50,000 17,260 17,26 61 50,000 18,491 14,432 50,000 17,260 17,26 61 50,000 19,391 15,280 50,000 20,009 20,000 63 50,000 20,291 16,137 50,000 22,748 22,748 67 50,000 22,944 17,874 50,000 22,748 22,748 67 50,000 23,914 19,646 50,000 22,748 22,748 67 50,000 24,833 20,552 50,000 24,574 24,574 68 50,000 23,914 19,646 50,000 24,574 24,574 67 50,000 23,904 17,874 50,000 22,748 22,748 67 50,000 22,994 17,874 50,000 23,660 23,660 68 50,000 22,994 17,874 50,000 24,574 24,574 67 50,000 23,914 19,646 50,000 24,574 24,574 67 50,000 23,914 19,646 50,000 24,574 24,574 67 50,000 24,833 20,552 50,000 24,574 24,574 67 50,000 25,762 21,471 50,000 29,159 29,159 77 50,000 31,251 27,170 50,000 31,809 31,809 77 50,000 31,251 27,170 50,000 32,670 32,670	42	50,000	3,290	1,452		•	·
44 50,000 4,519 2,404 50,000 4,519 4,2 45 50,000 5,160 2,906 50,000 5,160 4,7 46 50,000 5,816 3,424 50,000 5,816 5,5 47 50,000 6,487 3,959 50,000 6,487 6,2 48 50,000 7,171 4,512 50,000 7,171 7,0 49 50,000 7,871 5,083 50,000 7,871 7,8 50 50,000 8,587 5,678 50,000 8,659 8,65 51 50,000 10,076 6,940 50,000 10,290 10,29 52 50,000 10,076 6,940 50,000 11,277 11,97 55 50,000 11,638 8,292 50,000 11,127 11,12 54 50,000 12,444 8,998 50,000 12,836 12,83 56 50,000 13,266 9,723 50,000 12,836 12,83 57 50,000 14,955 11,218 50,000 14,578 14,57 58 50,000 14,955 11,218 50,000 17,260 17,260 50 50,000 16,707 12,784 50,000 17,260 17,260 61 50,000 17,595 13,599 50,000 19,092 19,093 62 50,000 18,491 14,432 50,000 17,260 17,260 61 50,000 17,595 13,599 50,000 19,092 19,093 63 50,000 18,491 14,432 50,000 17,260 17,260 64 50,000 20,291 16,137 50,000 20,009 20,000 64 50,000 22,094 17,874 50,000 22,748 22,748 67 50,000 24,833 20,552 50,000 21,837 21,837 71 50,000 24,833 20,552 50,000 24,574 24,574 68 50,000 23,000 18,755 50,000 22,748 22,748 67 50,000 24,833 20,552 50,000 24,574 24,574 68 50,000 22,994 17,874 50,000 22,48 22,748 67 50,000 23,000 18,755 50,000 24,574 24,574 68 50,000 23,914 19,646 50,000 24,574 24,574 69 50,000 24,833 20,552 50,000 27,334 27,334 71 50,000 26,695 22,408 50,000 27,334 27,334 72 50,000 27,629 23,356 50,000 27,334 27,334 73 50,000 28,550 24,313 50,000 29,159 29,159 75 50,000 31,251 27,170 50,000 31,809 31,809 76 50,000 31,251 27,170 50,000 32,670 32,670 32,670	43	50,000	3,896				
45	44	50,000					
47 50,000 6,487 3,959 50,000 6,487 6,22 48 50,000 7,171 4,512 50,000 7,171 7,00 49 50,000 7,871 5,083 50,000 7,871 7,8 50 50,000 8,587 5,678 50,000 8,659 8,66 51 50,000 10,076 6,940 50,000 10,290 10,25 52 50,000 10,849 7,606 50,000 11,127 11,12 54 50,000 11,638 8,292 50,000 11,977 11,97 55 50,000 12,444 8,998 50,000 12,836 12,83 56 50,000 13,266 9,723 50,000 13,703 13,703 57 50,000 14,103 10,462 50,000 14,578 14,57 58 50,000 14,955 11,218 50,000 15,460 15,460 15,465 16,35 60 50,000 16,707 12,784 50,000 17,260 17,260 61 50,000 17,595 13,599 50,000 18,174 18,174 62 50,000 19,391 15,280 50,000 20,009 20,000 64 50,000 20,291 16,137 50,000 20,009 20,000 65 50,000 22,094 17,874 50,000 22,748 22,748 67 50,000 23,000 18,755 50,000 22,748 22,748 67 50,000 23,000 18,755 50,000 22,748 22,748 67 50,000 23,000 18,755 50,000 22,748 22,748 67 50,000 23,000 18,755 50,000 22,748 22,748 67 50,000 23,914 19,646 50,000 24,574 24,574 67 50,000 23,914 19,646 50,000 24,574 24,574 68 50,000 23,914 19,646 50,000 27,334 27,334 71 50,000 27,629 23,356 50,000 27,334 27,334 72 50,000 27,629 23,356 50,000 29,159 29,159 75 50,000 31,251 27,170 50,000 31,809 31,809 77 50,000 31,251 27,170 50,000 32,670 32,670 32,670	45	50,000					4,213 4,766
47         50,000         6,487         3,959         50,000         6,487         6,27           48         50,000         7,171         4,512         50,000         7,1871         7,00           49         50,000         7,871         5,083         50,000         7,871         7,84           50         50,000         8,587         5,678         50,000         8,659         8,65           51         50,000         10,076         6,940         50,000         10,290         10,25           52         50,000         10,076         6,940         50,000         11,277         11,12           54         50,000         11,638         8,292         50,000         11,977         11,97           55         50,000         12,444         8,998         50,000         12,836         12,83           56         50,000         13,266         9,723         50,000         13,703         13,703           57         50,000         14,103         10,462         50,000         14,578         14,578           58         50,000         14,955         11,218         50,000         16,354         16,35           59         50,000	46	50,000	5,816	3,424	50.000	5 816	5,515
48 50,000 7,171 4,512 50,000 7,171 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7,000 7	47	50,000	6,487	3,959			·
49         50,000         7,871         5,083         50,000         7,871         7,8           50         50,000         8,587         5,678         50,000         8,659         8,65           51         50,000         9,322         6,297         50,000         10,290         10,29           52         50,000         10,076         6,940         50,000         11,127         11,127           53         50,000         11,638         8,292         50,000         11,977         11,197           54         50,000         11,638         8,292         50,000         11,977         11,197           55         50,000         12,444         8,998         50,000         12,836         12,83           56         50,000         13,266         9,723         50,000         14,578         14,57           57         50,000         14,103         10,462         50,000         15,460         15,46           59         50,000         14,955         11,218         50,000         15,460         15,46           59         50,000         16,707         12,784         50,000         17,260         17,26           61         50,000	48	50,000	7,171				
50         50,000         8,587         5,678         50,000         8,659         8,665           51         50,000         9,322         6,297         50,000         9,466         9,46           52         50,000         10,076         6,940         50,000         10,290         10,250           53         50,000         10,849         7,606         50,000         11,127         11,12           54         50,000         11,638         8,292         50,000         11,977         11,97           55         50,000         12,444         8,998         50,000         13,703         13,703           56         50,000         13,266         9,723         50,000         14,578         14,57           57         50,000         14,955         11,218         50,000         15,460         15,46           59         50,000         15,823         11,990         50,000         16,354         16,354           60         50,000         17,595         13,599         50,000         18,174         18,17           61         50,000         18,491         14,432         50,000         20,092         19,092           63         50,000 <td>49</td> <td>50,000</td> <td></td> <td></td> <td>·</td> <td>-</td> <td></td>	49	50,000			·	-	
52         50,000         10,076         6,940         50,000         10,290         10,250           53         50,000         10,849         7,606         50,000         11,127         11,127           54         50,000         11,638         8,292         50,000         11,977         11,97           55         50,000         12,444         8,998         50,000         12,836         12,83           56         50,000         13,266         9,723         50,000         13,703         13,703           57         50,000         14,103         10,462         50,000         14,578         14,57           58         50,000         14,955         11,218         50,000         15,460         15,460           59         50,000         15,823         11,990         50,000         16,354         16,354           60         50,000         17,260         17,260         17,260         17,260         17,260           61         50,000         17,595         13,599         50,000         18,174         18,174         18,174           62         50,000         18,491         14,432         50,000         20,009         20,000	50						7,648 8,659
52         50,000         10,076         6,940         50,000         10,290         10,290           53         50,000         10,849         7,606         50,000         11,127         11,12           54         50,000         11,638         8,292         50,000         11,977         11,97           55         50,000         12,444         8,998         50,000         12,836         12,83           56         50,000         13,266         9,723         50,000         14,578         14,57           57         50,000         14,103         10,462         50,000         14,578         14,57           58         50,000         14,955         11,218         50,000         15,460         15,46           59         50,000         15,823         11,990         50,000         16,354         16,354           60         50,000         17,595         13,599         50,000         18,174         18,177           62         50,000         17,595         13,599         50,000         18,174         18,177           62         50,000         19,391         15,280         50,000         20,009         20,009           63         5	51	50,000	9,322	6,297	50.000	9 466	9,466
53         50,000         10,849         7,606         50,000         11,127         11,127         11,127         11,127         51,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,127         11,282         12,82         20,000         12,82         20,000         12,82         20,000         14,82         20,000         14,578         14,57         14,57         15,460         20,000		50,000	10,076	6,940			
54         50,000         11,638         8,292         50,000         11,977         11,975           55         50,000         12,444         8,998         50,000         12,836         12,836           56         50,000         13,266         9,723         50,000         13,703         13,703           57         50,000         14,103         10,462         50,000         14,578         14,57           58         50,000         14,955         11,218         50,000         15,460         15,46           59         50,000         15,823         11,990         50,000         16,354         16,35           60         50,000         16,707         12,784         50,000         17,260         17,260           61         50,000         17,595         13,599         50,000         18,174         18,174           62         50,000         18,491         14,432         50,000         19,092         19,092           63         50,000         19,391         15,280         50,000         20,009         20,006           64         50,000         20,291         16,137         50,000         20,924         20,924           65		50,000	10,849			•	
55         50,000         12,444         8,998         50,000         12,836         12,836           56         50,000         13,266         9,723         50,000         13,703         13,703           57         50,000         14,103         10,462         50,000         14,578         14,578           58         50,000         14,955         11,218         50,000         15,460         15,46           59         50,000         15,823         11,990         50,000         16,354         16,354           60         50,000         16,707         12,784         50,000         17,260         17,26           61         50,000         17,595         13,599         50,000         18,174         18,174           62         50,000         18,491         14,432         50,000         19,092         19,092           63         50,000         19,391         15,280         50,000         20,009         20,009           64         50,000         20,291         16,137         50,000         20,924         20,92           65         50,000         21,192         17,002         50,000         21,837         21,837           66	54	50,000	11,638				
57         50,000         14,103         10,462         50,000         14,578         14,578           58         50,000         14,955         11,218         50,000         15,460         15,46           59         50,000         15,823         11,990         50,000         16,354         16,354           60         50,000         16,707         12,784         50,000         17,260         17,26           61         50,000         17,595         13,599         50,000         18,174         18,174           62         50,000         18,491         14,432         50,000         19,092         19,092           63         50,000         19,391         15,280         50,000         20,009         20,009           64         50,000         20,291         16,137         50,000         20,924         20,924           65         50,000         21,192         17,002         50,000         21,837         21,837           66         50,000         23,904         17,874         50,000         22,748         22,748           67         50,000         23,914         19,646         50,000         24,574         24,574           68	55	50,000	12,444				12,836
57         50,000         14,103         10,462         50,000         14,578         14,578           58         50,000         14,955         11,218         50,000         15,460         15,46           59         50,000         15,823         11,990         50,000         16,354         16,35           60         50,000         16,707         12,784         50,000         17,260         17,26           61         50,000         17,595         13,599         50,000         18,174         18,174           62         50,000         18,491         14,432         50,000         19,092         19,092           63         50,000         19,391         15,280         50,000         20,009         20,009           64         50,000         20,291         16,137         50,000         20,924         20,924           65         50,000         21,192         17,002         50,000         21,837         21,837           66         50,000         22,094         17,874         50,000         22,748         22,746           67         50,000         23,914         19,646         50,000         23,660         23,660           68		·		9,723	50,000	13,703	13,703
58         50,000         14,955         11,218         50,000         15,460         15,460           59         50,000         15,823         11,990         50,000         16,354         16,35           60         50,000         16,707         12,784         50,000         17,260         17,260           61         50,000         17,595         13,599         50,000         18,174         18,177           62         50,000         18,491         14,432         50,000         19,092         19,092           63         50,000         19,391         15,280         50,000         20,009         20,009           64         50,000         20,291         16,137         50,000         20,924         20,922           65         50,000         21,192         17,002         50,000         21,837         21,837           66         50,000         22,094         17,874         50,000         22,748         22,748           67         50,000         23,914         19,646         50,000         23,660         23,666           68         50,000         24,833         20,552         50,000         25,491         25,491           70				10,462	50,000	14,578	14,578
59         50,000         15,823         11,990         50,000         16,354         16,354           60         50,000         16,707         12,784         50,000         17,260         17,260           61         50,000         17,595         13,599         50,000         18,174         18,174           62         50,000         18,491         14,432         50,000         19,092         19,092           63         50,000         19,391         15,280         50,000         20,009         20,009           64         50,000         20,291         16,137         50,000         20,924         20,924           65         50,000         21,192         17,002         50,000         21,837         21,837           66         50,000         22,094         17,874         50,000         22,748         22,748           67         50,000         23,000         18,755         50,000         23,660         23,660           68         50,000         23,914         19,646         50,000         25,491         25,491           70         50,000         24,833         20,552         50,000         27,334         26,413           71		-	14,955	11,218	50,000	•	
60         50,000         16,707         12,784         50,000         17,260         17,26           61         50,000         17,595         13,599         50,000         18,174         18,174           62         50,000         18,491         14,432         50,000         19,092         19,093           63         50,000         19,391         15,280         50,000         20,009         20,009           64         50,000         20,291         16,137         50,000         20,924         20,924           65         50,000         21,192         17,002         50,000         21,837         21,837           66         50,000         22,094         17,874         50,000         23,660         23,660           67         50,000         23,000         18,755         50,000         23,660         23,660           68         50,000         23,914         19,646         50,000         24,574         24,574           69         50,000         24,833         20,552         50,000         25,491         25,491           70         50,000         26,695         22,408         50,000         27,334         27,334           72			15,823	11,990			
62         50,000         18,491         14,432         50,000         19,092         19,092           63         50,000         19,391         15,280         50,000         20,009         20,009           64         50,000         20,291         16,137         50,000         20,924         20,924           65         50,000         21,192         17,002         50,000         21,837         21,837           66         50,000         22,094         17,874         50,000         22,748         22,748           67         50,000         23,000         18,755         50,000         23,660         23,660           68         50,000         23,914         19,646         50,000         24,574         24,574           69         50,000         24,833         20,552         50,000         25,491         25,491           70         50,000         25,762         21,471         50,000         26,413         26,413           71         50,000         27,629         23,356         50,000         27,334         27,334           72         50,000         27,629         23,356         50,000         29,159         29,159           74	60	50,000	16,707	12,784			17,260
62         50,000         18,491         14,432         50,000         19,092         19,092           63         50,000         19,391         15,280         50,000         20,009         20,009           64         50,000         20,291         16,137         50,000         20,924         20,924           65         50,000         21,192         17,002         50,000         21,837         21,837           66         50,000         22,094         17,874         50,000         22,748         22,748           67         50,000         23,000         18,755         50,000         23,660         23,660           68         50,000         23,914         19,646         50,000         24,574         24,574           69         50,000         24,833         20,552         50,000         25,491         25,491           70         50,000         25,762         21,471         50,000         27,334         27,334           71         50,000         26,695         22,408         50,000         27,334         27,334           72         50,000         28,550         24,313         50,000         29,159         29,159           74				13,599	50,000	18,174	18,174
63         50,000         19,391         15,280         50,000         20,009         20,009           64         50,000         20,291         16,137         50,000         20,924         20,924           65         50,000         21,192         17,002         50,000         21,837         21,837           66         50,000         22,094         17,874         50,000         22,748         22,748           67         50,000         23,000         18,755         50,000         23,660         23,660           68         50,000         23,914         19,646         50,000         24,574         24,574           69         50,000         24,833         20,552         50,000         25,491         25,491           70         50,000         25,762         21,471         50,000         26,413         26,413           71         50,000         27,629         23,356         50,000         27,334         27,334           72         50,000         28,550         24,313         50,000         29,159         29,159           74         50,000         29,460         25,267         50,000         30,936         30,936           76			•	14,432	50,000	19,092	19,092
64         50,000         20,291         16,137         50,000         20,924         20,924           65         50,000         21,192         17,002         50,000         21,837         21,837           66         50,000         22,094         17,874         50,000         22,748         22,748           67         50,000         23,000         18,755         50,000         23,660         23,660           68         50,000         23,914         19,646         50,000         24,574         24,574           69         50,000         24,833         20,552         50,000         25,491         25,491           70         50,000         25,762         21,471         50,000         26,413         26,413           71         50,000         26,695         22,408         50,000         27,334         27,334           72         50,000         27,629         23,356         50,000         29,159         29,159           74         50,000         28,550         24,313         50,000         29,159         29,159           74         50,000         30,360         26,218         50,000         30,936         30,936           76			19,391	15,280	50,000		
65     50,000     21,192     17,002     50,000     21,837     21,837       66     50,000     22,094     17,874     50,000     22,748     22,748       67     50,000     23,000     18,755     50,000     23,660     23,660       68     50,000     23,914     19,646     50,000     24,574     24,574       69     50,000     24,833     20,552     50,000     25,491     25,491       70     50,000     25,762     21,471     50,000     26,413     26,413       71     50,000     26,695     22,408     50,000     27,334     27,334       72     50,000     27,629     23,356     50,000     29,159     29,159       74     50,000     29,460     25,267     50,000     30,053     30,053       75     50,000     31,251     27,170     50,000     31,809     31,809       76     50,000     32,135     28,120     50,000     32,670     32,670     32,670		•	20,291	16,137	50,000		
67         50,000         23,000         18,755         50,000         23,660         23,660           68         50,000         23,914         19,646         50,000         24,574         24,574           69         50,000         24,833         20,552         50,000         25,491         25,491           70         50,000         25,762         21,471         50,000         26,413         26,413           71         50,000         26,695         22,408         50,000         27,334         27,334           72         50,000         27,629         23,356         50,000         28,254         28,254           73         50,000         28,550         24,313         50,000         29,159         29,159           74         50,000         29,460         25,267         50,000         30,936         30,936           75         50,000         31,251         27,170         50,000         31,809         31,809           77         50,000         32,135         28,120         50,000         32,670         32,670	65	50,000	21,192	17,002			21,837
67         50,000         23,000         18,755         50,000         23,660         23,660           68         50,000         23,914         19,646         50,000         24,574         24,574           69         50,000         24,833         20,552         50,000         25,491         25,491           70         50,000         25,762         21,471         50,000         26,413         26,413           71         50,000         26,695         22,408         50,000         27,334         27,334           72         50,000         27,629         23,356         50,000         28,254         28,254           73         50,000         28,550         24,313         50,000         29,159         29,159           74         50,000         29,460         25,267         50,000         30,936         30,936           76         50,000         31,251         27,170         50,000         31,809         31,809           77         50,000         32,135         28,120         50,000         32,670         32,670			•	17,874	50,000	22,748	22,748
68         50,000         23,914         19,646         50,000         24,574         24,574           69         50,000         24,833         20,552         50,000         25,491         25,491           70         50,000         25,762         21,471         50,000         26,413         26,413           71         50,000         26,695         22,408         50,000         27,334         27,334           72         50,000         27,629         23,356         50,000         28,254         28,254           73         50,000         28,550         24,313         50,000         29,159         29,159           74         50,000         29,460         25,267         50,000         30,936         30,936           76         50,000         31,251         27,170         50,000         31,809         31,809           77         50,000         32,135         28,120         50,000         32,670         32,670			•		50,000	23,660	23,660
69         50,000         24,833         20,552         50,000         25,491         25,491           70         50,000         25,762         21,471         50,000         26,413         26,413           71         50,000         26,695         22,408         50,000         27,334         27,334           72         50,000         27,629         23,356         50,000         28,254         28,254           73         50,000         28,550         24,313         50,000         29,159         29,159           74         50,000         29,460         25,267         50,000         30,053         30,053           75         50,000         30,360         26,218         50,000         30,936         30,936           76         50,000         31,251         27,170         50,000         31,809         31,809           77         50,000         32,135         28,120         50,000         32,670         32,670				19,646	50,000		
70         50,000         25,762         21,471         50,000         26,413         26,413           71         50,000         26,695         22,408         50,000         27,334         27,334           72         50,000         27,629         23,356         50,000         28,254         28,254           73         50,000         28,550         24,313         50,000         29,159         29,159           74         50,000         29,460         25,267         50,000         30,053         30,053           75         50,000         30,360         26,218         50,000         30,936         30,936           76         50,000         31,251         27,170         50,000         31,809         31,809           77         50,000         32,135         28,120         50,000         32,670         32,670			24,833	20,552	50,000		
72         50,000         27,629         23,356         50,000         28,254         28,254           73         50,000         28,550         24,313         50,000         29,159         29,159           74         50,000         29,460         25,267         50,000         30,053         30,053           75         50,000         30,360         26,218         50,000         30,936         30,936           76         50,000         31,251         27,170         50,000         31,809         31,809           77         50,000         32,135         28,120         50,000         32,670         32,670	70	50,000	25,762	21,471			26,413
72     50,000     27,629     23,356     50,000     28,254     28,254       73     50,000     28,550     24,313     50,000     29,159     29,159       74     50,000     29,460     25,267     50,000     30,053     30,053       75     50,000     30,360     26,218     50,000     30,936     30,936       76     50,000     31,251     27,170     50,000     31,809     31,809       77     50,000     32,135     28,120     50,000     32,670     32,670				22,408	50,000	27,334	27.334
73     50,000     28,550     24,313     50,000     29,159     29,159       74     50,000     29,460     25,267     50,000     30,053     30,053       75     50,000     30,360     26,218     50,000     30,936     30,936       76     50,000     31,251     27,170     50,000     31,809     31,809       77     50,000     32,135     28,120     50,000     32,670     32,670			27,629	23,356	50,000		
74     50,000     29,460     25,267     50,000     30,053     30,053       75     50,000     30,360     26,218     50,000     30,936     30,936       76     50,000     31,251     27,170     50,000     31,809     31,809       77     50,000     32,135     28,120     50,000     32,670     32,670		50,000	28,550	24,313		,	
75 50,000 30,360 26,218 50,000 30,936 30,936 76 50,000 31,251 27,170 50,000 31,809 31,809 77 50,000 32,135 28,120 50,000 32,670 32,670		50,000	29,460				
77 50,000 32,135 28,120 50,000 32,670 32,670	75	50,000					30,936
77 50,000 32,135 28,120 50,000 32,670 32,670			31,251	27,170	50,000	31.809	31 809
			32,135	28,120			
78 50,000 33,007 29,070 50,000 33,516 33,516	78	50,000	33,007		·		
79 50,000 33,861 30,013 50,000 34,341 34,341	79	50.000					
80 50,000 34,690 30,942 50,000 35,138 35,138	30	50,000					

### The Penn Mutual Life Insurance Company Form FL-08(S) Flexible Premium Adjustable Life Insurance Comparison Of Legal Minimum Cash Value to Form FL-08(S) Cash Surrender Value

### Male Issue Age 35 Standard Nontobacco Annual Premium of \$906.84 Specified Amount of \$50,000 Includes Policy Value

Att Age 81 82 83 84 85	Death Benefit 50,000 50,000	Reserve	Cash	Death		
81 82 83 84 85	50,000	Reserve				
82 83 84 85	,		Value	Benefit	Reserve	Cash Surrender Value
83 84 85	50 000	35,493	31,850	50,000	35,908	35,908
84 85	30,000	36,263	32,735	50,000	36,644	
85	50,000	37,008	33,590	50,000	37,352	36,644
	50,000	37,726	34,420	50,000	38,033	37,352
	50,000	38,417	35,226	50,000	38,683	38,033 38,683
86	50,000	39,075	36,004	50,000	39,300	39,300
87	50,000	39,696	36,749	50,000	39,880	39,880
88	50,000	40,277	37,455	50,000	40,420	40,420
89	50,000	40,816	38,119	50,000	40,920	40,920
90	50,000	41,313	38,737	50,000	41,380	41,380
91	50,000	41,769	39,310	50,000	41,801	41,801
92	50,000	42,200	39,836	50,000	42,200	42,196
93	50,000	42,610	40,333	50,000	42,610	42,567
94	50,000	42,998	40,803	50,000	42,998	42,913
95	50,000	43,364	41,245	50,000	43,364	43,234
96	50,000	43,709	41,656	50,000	43,709	43,527
97	50,000	44,040`	42,033	50,000	44,040	43,807
98	50,000	44,355	42,395	50,000	44,355	44,071
99	50,000	44,652	42,740	50,000	44,652	44,319
100	50,000	44,924	43,065	50,000	44,924	44,545
101	50,000	45,159	43,363	50,000	45,159	44,744
102	50,000	45,390	43,620	50,000	45,390	44,937
103	50,000	45,617	43,872	50,000	45,617	45,126
104	50,000	45,839	44,118	50,000	45,839	45,310
105	50,000	46,054	44,359	50,000	46,054	45,487
106	50,000	46,265	44,594	50,000	46,265	45,660
07	50,000	46,472	44,822	50,000	46,472	45,828
08	50,000	46,674	45,045	50,000	46,674	45,991
09	50,000	46,872	45,263	50,000	46,872	46,149
110	50,000	47,065	45,474	50,000	47,065	46,302
111	50,000	47,253	45,679	50,000	47,253	46,449
12	50,000	47,438	45,878	50,000	47,438	46,591
13	50,000	47,619	46,071	50,000	47,619	46,729
14	50,000	47,798	46,258	50,000	47,798	46,862
15	50,000	47,974	46,438	50,000	47,974	46,993
16	50,000	48,150	46,612	50,000	48,150	47,124
17	50,000	48,329	46,780	50,000	48,329	47,264
18	50,000	48,518	46,941	50,000	48,518	47,437
19	50,000	48,742	47,095	50,000	48,742	47,711
20	50,000	49,310	47,171	50,000	49,310	48,363
21	50,000	50,000	50,000	50,000	50,000	50,000

# Illustrative Values Calculation for Form FL-08(U)

Years 1 and 15

Unisex Age 35; Standard Nontobacco

Specified Amount of \$50,000

Duration at Start of Illustration = 0
Issue Date = 7/1/08

Cash Surrender Value (11)	411 66353	384,68883	357,64525	330,53260	303.35070	276.09938	248.77846	221.38776	193.92710	166,39632	138.79522	111.12362		0.001	0400./3040	0410.13119	8412 04800	8414 35310	9445 75000	0413.70002	0417.17176	8418.58733	8420.00675	8421.43002	8422.85715	8424.28816
Surrender Charge (10)	316.80	316.80	316.80	316.80	316.80	316.80	316.80	316.80	316.80	316.80	316.80	316.80		ć	8.6	8.6	8 6	9 6	9 6	8 6	0.00	0.00	0.00	0.00	0.00	0.00
End of Mo. Poilcy Value (9)	728.46353	701.48883	674.44525	647.33260	620.15070	592.89938	565.57846	538.18776	510.72710	483.19632	455.59522	427.92362	7652 00	8468 75846	8410 45110	8411 54770	8412 94800	8414 35210	8415 76002	8417 17176	9419 50722	9470,00675	0420.00073	6421.43002	0422.85/15	0474.20010
Interest Factor (8)	1.00247	1.00247	1.00247	1.00247	1.00247	1.00247	1.00247	1.00247	1.00247	1.00247	1.00247	1.00247		1 00247	1 00247	1 00247	1.00247	1.00247	1 00247	1 00247	1 00247	1.00247	1.00247	1.00247	1.00247	1.0004
Begin of Mo. Policy Value (after mo. deductions)	726.67136	699.76303	672.78598	645.74003	618.62500	591.44072	564.18702	536.86371	509.47061	482.00756	454.47436	426.87084		8388 07121	8389 46051	8390.85359	8392.25044	8393.65109	8395.05555	8396.46381	8397 87590	8300 20183	8400 74460	8402 43622	8403 56271	- 1700:0010
Monthly Expense Charges (6)	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40	24.40		00.6	00.6	9.00	9.00	9.00	9.00	00.6	00.6	6	00.0	8 6	6 6 6	;
Base Cost of Insurance (5)	4.29814	4.30050	4.30286	4.30522	4.30760	4.30997	4.31236	4.31475	4.31715	4.31955	4.32196	4.32437	•	10.29829	10.29794	10.29760	10.29725	10.29690	10.29656	10.29621	10.29585	10.29550	10 29515	10.29480	10.29444	
Amount at Risk (4)	49121.62039	49148.52636	49175.50105	49202.54464	49229.65729	49256.83919	49284.09051	49311.41143	49338.80213	49356.26278	49393.79357	49421.39467		41469.62039	41468.23143	41466.83870	41465.44219	41464.04189	41462.63778	41461.22987	41459.81813	41458.40256	41456.98314	41455.55987	41454.13273	
Begin of Mo. Policy Value (before mo. deductions)	755.36950	728.46353	701.48883	674.44525	647.33260	620.15070	592.89938	202.27846	540 70740	01/2/10	483.19632	455.59522		8407.36950	8408.75846	8410.15119	8411.54770	8412.94800	8414.35210	8415.76002	8417.17176	8418.58733	8420.00675	8421.43002	8422.85715	
Premium Load (2)	133.3005	0.000	0.000	0.0000	0.000	0.000	9000	886	0000	0.000	0.000	0000		133,3005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Premium (1)	888.67	9.0	900	9.6	0.00	900	9.0	8.6	8.5	8.5	8 6	3		888.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Month	Jac.	on o	g to	j ž	5	) ac	i 4	Na.	Apr	i n	, in	5		Jul	Aug	Sep	ت د د	<u>ک</u> وک	S .	Jan	Feb	Mar	Αpr	May	Jun	

 $(2)=.15^{+}(1)$  in all years (3)=(8)+(1)-(2)

(4)=(50000/1.00247)-(3) (5)=(.00105/12)\*(4) or (.00298/12)\*(4) year 1

### The Penn Mutual Life Insurance Company Form FL-08(U) Flexible Premium Adjustable Life Insurance Comparison Of Legal Minimum Cash Value to Form FL-08(U) Cash Surrender Value

### Unisex Issue Age 35 Standard Nontobacco Annual Premium of \$888.67 Specified Amount of \$50,000 Includes Policy Value

		Legal Minimu	m		Policy Actual	
Att Age	Death Benefit	Reserve	Cash Value	Death Benefit	Reserve	Cash Surrender Value
36	50,000	0	0	50,000	110	
37	50,000	512	0	50,000	579	110
38	50,000	1,037	0	50,000	1,048	579
39	50,000	1,577	135	50,000		1,048
40	50,000	2,131	537	50,000	1,577 2,131	1,528 2,019
41	50,000	2,702	956	50,000	2,702	2,521
42	50,000	3,290	1,393	50,000	3,290	3,032
43	50,000	3,896	1,846	50,000	3,896	
44	50,000	4,519	2,317	50,000	4,519	3,552
45	50,000	5,160	2,804	50,000	5,160	4,080 4,617
46	50,000	5,816	3,309	50,000	5,816	5,349
47	50,000	6,487	3,829	50,000	6,487	6,097
48	50, <b>000</b>	7,171	4,368	50,000	7,171	6,856
49	50,000	7,871	4,924	50,000	7,871	7,633
50	50,000	8,587	5,503	50,000	8,587	8,424
51	50,000	9,322	6,104	50,000	9,322	9,212
52	50,000	10,076	6,727	50,000	10,076	10,015
53	50,000	10,849	7,371	50,000	10,849	10,830
54	50,000	11,638	8,035	50,000	11,658	11,658
55	50,000	12,444	8,718	50,000	12,495	12,495
56	50,000	13,266	9,418	50,000	13,339	13,339
57	50,000	14,103	10,133	50,000	14,192	14,192
58	50,000	14,955	10,864	50,000	15,051	15,051
59	50,000	15,823	11,611	50,000	15,923	15,923
60	50,000	16,707	12,378	50,000	16,804	16,804
61	50,000	17,595	13,165	50,000	17,694	17,694
62	50,000	18,491	13,969	50,000	18,589	18,589
63	50,000	19,391	14,789	50,000	19,485	19,485
64	50,000	20,291	15,619	50,000	20,380	20,380
65	50,000	21,192	16,458	50,000	21,275	21,275
66 67	50,000	22,094	17,306	50,000	22,170	22,170
67	50,000	23,000	18,164	50,000	23,066	23,066
68	50,000	23,914	19,034	50,000	23,965	23,965
69	50,000	24,833	19,918	50,000	24,867	24,867
70	50,000	25,762	20,815	50,000	25,774	25,774
71	50,000	26,695	21,729	50,000	26,695	26,680
72	50,000	27,629	22,654	50,000	27,629	27,584
73	50,000	28,550	23,588	50,000	28,550	28,477
74	50,000	29,460	24,520	50,000	29,460	
75	50,000	30,360	25,451	50,000	30,360	29,358 30,230
76	50,000	31,251	26,383	50,000	31,251	31,092
77	50,000	32,135	27,314	50,000	32,135	31,944
78	50,000	33,007	28,245	50,000	33,007	
79	50,000	33,861	29,170	50,000	33,861	32,781
80	50,000	34,690	30,083	50,000	34,690	33,598 34,391

### The Penn Mutual Life Insurance Company Form FL-08(U) Flexible Premium Adjustable Life Insurance Comparison Of Legal Minimum Cash Value to Form FL-08(U) Cash Surrender Value

### Unisex Issue Age 35 Standard Nontobacco Annual Premium of \$888.67 Specified Amount of \$50,000 Includes Policy Value

		Legal Minimu	m	Policy Actual				
Att	Death		Cash	Death		Cook Summer day		
Age	Benefit	Reserve	Value	Benefit	Reserve	Cash Surrender		
81	50,000	35,493	30,978	50,000	35,493	Value		
82	50,000	36,263	31,854	50,000	36,263	35,159		
83	50,000	37,008	32,700	50,000		35,895		
84	50,000	37,726	33,521	50,000	37,008	36,601		
85	50,000	38,417	34,317	50,000	37,726 38,417	37,280 37,929		
			·	23,000	00,411	37,929		
86	50,000	39,075	35,085	50,000	39,075	38,544		
87	50,000	39,696	35,821	50,000	39,696	39,128		
88	50,000	40,277	36,524	50,000	40,277	39,670		
89	50,000	40,816	37,182	50,000	40,816	40,172		
90	50,000	41,313	37,794	50,000	41,313	40,632		
91	50,000	41,769	38,359	50,000	41,769	44.050		
92	50,000	42,200	38,882	50,000		41,058		
93	50,000	42,610	39,404	50,000	42,200	41,479		
94	50,000	42,998	39,918	50,000	42,610	41,888		
95	50,000	43,364	40,413	50,000	42,998 43,364	42,279 42,642		
96	50,000	42 700	40.070		,	,		
97	50,000	43,709	40,876	50,000	43,709	42,964		
98	50,000	44,04Ò	41,286	50,000	44,040	43,254		
99	50,000	44,355	41,655	50,000	44,355	43,505		
100		44,652	41,967	50,000	44,652	43,775		
100	50,000	44,924	42,308	50,000	44,924	44,048		
101	50,000	45,159	42,658	50,000	45,159	44,308		
102	50,000	45,390	42,991	50,000	45,390	44,569		
103	50,000	45,617	43,328	50,000	45,617	44,827		
104	50,000	45,839	43,665	50,000	45,839	45,079		
105	50,000	46,054	43,999	50,000	46,054	45,321		
106	50,000	46,265	44,321	50,000	46.005	45.540		
107	50,000	46,472	44,626	50,000	46,265	45,548 45,700		
108	50,000	46,674	44,913	50,000	46,472	45,760 45,050		
109	50,000	46,872	45,180	50,000	46,674	45,958		
110	50,000	47,065	45,432	50,000	46,872 47,065	46,142 46,311		
111	50.000	47.050				,,,,,,		
112	50,000	47,253	45,666	50,000	47,253	46,465		
113	50,000	47,438	45,877	50,000	47,438	46,607		
114	50,000	47,619	46,069	50,000	47,619	46,742		
	50,000	47,798	46,248	50,000	47,798	46,884		
115	50,000	47,974	46,445	50,000	47,974	47,015		
116	50,000	48,150	46,620	50,000	48,150	47,145		
117	50,000	48,329	46,787	50,000	48,329			
118	50,000	48,518	46,950	50,000	48,518	47,285 47,454		
119	50,000	48,742	47.092	50,000	48,742	47,454		
120	50,000	49,310	47,184	50,000	49,310	47,732 48,378		
121	50,000	50,000	50,000	50,000	50,000	50,000		

### Life, Accident & Health, Annuity, Credit Transmittal Document

1.	Prepared for the State of	Arkaı	rkansas								
2.				Deng	rtme	nt Use On	lv				
2.	State Tracking ID			Бера	ii tilite	iii Osc Oii	1 y				
3.	Insurer Name & Address		Domicile	Insure Licens Type	e	NAIC Group#	NAIC#	FEIN#	State #		
	Penn Mutual Life Insuran VIM: C3G Philadelphia, Pa 19172	ice Co.	PA	Life, Variabl Contrac	le	850	67644	23-0952300			
4.	Contact Name & Address	Tel	ephone #		F	ax#		E-mail Add	ress		
VIM:	Mutual Life Insurance Co.		215-956-829	90		215-950	6-8145	bellew.rita(	@pennmutual.com		
5.	Requested Filing Mode	X Re	K Review & Approval File & Use Informational								
		Combination (please explain):									
		Other (please explain):									
6.	Company Tracking Number FL-08(S)(AR), etc							***************************************			
7.	X New Submission	Resub	mission	Pre	evious	file #					
8.	Market		X Individu	ıal F	ranch	ise					
			Group		Sı	nall	Larg	ge Sma	all and Large		
					Employer Association Blanket Discretionary Trust Other:						
9.	Type of Insurance		L091 Indiv	idual Lif	_ife – Flexible Premium Adjustable Life						
10.	Product Coding Matrix Filing Code		L091.001								
11.	Submitted Documents	X FORMS X Policy Outline of Coverage Application/Enrollment X Rider/Endorsement Schedule of Benefits Other  Rates							Certificate Advertising		
		New Rate Revised Rate  FILING OTHER THAN FORM OR RATE: Please explain:  SUPPORTING DOCUMENTATION									
		SUPPORTING D  Articles of Incorpora				ENIAII		ety: A wth animatics			
			Association I X Statement X Actuarial N	Bylaws of Variab Memorand	Trust Agreements iability X Certifications						

LHTD-1. Page 1 of 2

12.	Filing Submission Date	April 14, 20	008		
13	Filing Fee (If required)	Amount	\$120.00	Check Date	03/26/08
		Retaliatory	Yes No	Check Number	0842862
14.	Date of Domiciliary Approval	Filed in Doi	micile state of PA on 4/	10/08 and is pending a	pproval

15.

Filing Description:

The Penn Mutual Life Insurance Company is submitting the following forms for your review and approval:

Form FL-08(S)(AR)	<u>Title</u> Flexible Premium Adjustable Life Insurance Policy	Form Replaced None
FL-08(U)(AR)	Flexible Premium Adjustable Life Insurance Policy	None
OPBA-08	Rider-Overloan Protection Benefit Agreement	None

Policy FL-08(S)(AR) and FL-08(U)(AR) are flexible premium adjustable universal life insurance policies to be marketed to insureds seeking protection, estate and business planning. FL-08(S)(AR) is a sex-distinct version of the policy. FL-08(U)(AR) is a unisex version of the policy and will only be used in those situations where the Norris decision is applicable. We have placed brackets around the variable information found in the specifications.

The enclosed form OPBA-08 is a rider that will prevent the policy from lapsing when the indebtedness on the policy exceeds or equals the amount as described in the Overloan Protection Benefit provision of the form. It is our intention to make the enclosed rider available on the above referenced policies, as well as other flexible premium adjustable life insurance policies that will be approved in the future by your department.

We have placed brackets around the variable information which is found on the Policy Specifications. The enclosed Statement of Variability lists the ranges for this variable information.

The application that will be used with these products is PM1143 approved by your department on 1/26/06.

These forms are sold through agents to individuals in the general marketplace.

Should you have any questions, please contact Rita Bellew by **phone** at 215-956-8290, **email** at bellew.rita@pennmutual.com, or **fax** at 215-956-8145.

16.	Cortification	(If required)
101	Certification	(II reauirea)

I HEREBY CERTIFY that I have reviewed the applicable filing requirements for this filing, and the filing complies with all applicable statutory and regulatory provisions for the state of Arkansas

Print Name

Nancy A. Yannuzzi

Title

Senior Manager of Policy Forms

Signature

Date:

04/14/2008

LHTD-1, Page 2 of 2

17.	. Form Filing Attachment		
This filing transmittal is part of company tracking number		FL-08(S)(AR), etc.	
This filing corresponds to rate filing company tracking number			

	Document Name	Form Number		Replaced Form Number
	Description			Previous State Filing Number
01	Flexible Premium Adjustable Life Insurance Policy	FL-08(S)(AR)	X Initial Revised Other	N/A
02	Flexible Premium Adjustable Life Insurance Policy	FL-08(U)(AR)	X Initial Revised Other	N/A
03	Rider - Overloan Protection Benefit Agreement	OPBA-08	X Initial Revised Other	N/A
04			Initial Revised Other	
05			Initial Revised Other	
06			Initial Revised Other	
07			Initial Revised Other	
08			Initial Revised Other	
09			Initial Revised Other	
10	t		Initial Revised Other	
11			Initial Revised Other	

LH FFA-1

18.	Rate Filing Attachment				
This	filing transmittal is part of company track	ing number	FL-08(S)(AR), etc.		
This	filing corresponds to form filing company	tracking number			
Over	all percentage rate indication (when appli	cable)			
	all percentage rate impact for this filing		%		
		Affected Form	70	Previous State Filing	
	Document Name	Numbers		Number	
	<u> </u>				
01	Description		New		
01			Revised		
			Request +%%		
			Other		
02			New		
			Revised		
			Request +%%		
			Other		
03			New		
			Revised		
			Request +%%		
04			Other		
04			New		
			Revised		
			Request +%% Other		
05			New		
			Revised		
			Request +%%		
			Other		
06			New		
			Revised		
			Request +%%		
07			Other		
07			New		
			Revised		
			Request +%% Other		
08			New		
			Revised		
			Request +%%		
			Other		
09			New		
			Revised		
			Request +%%		
			Other		
10			New		
			Revised		
			Request +%%		
			Other		

LH RFA-1

### STATEMENT OF VARIABILITY

### Form Number(s) FL-08(S), FL-08(U), and OPBA-08

Enclosed is a sample copy of the above form, annotated at each item which is variable and contains brackets. Any use of variability shall be administered in a uniform and non-discriminatory manner.

Date: April 1, 2008

Section Policy Specifications	Pg 3	<u>Description</u> - Specified Amount, Initial Premium and Planned Premium will vary based on the owner's financial objective.
Policy Specifications & Add'l Policy Specs Policy Specifications & Add'l Policy Specs	Pg 3, Pg 21, & Pg 21 (cont'd)  Pg 3, Pg 21, & Pg 21 (cont'd)	<ul> <li>Male will vary based on the insured's gender (if applicable). If this were a unisex policy, nothing would print (neither male nor female).</li> <li>Rate Class will vary based on the insured's rate classification from one of the following: Standard Nontobacco, Standard Tobacco, Special Nontobacco, Special Tobacco, Preferred Plus Nontobacco, Preferred Plus</li> </ul>
Policy Specifications	Pg 3	Tobacco.  - The Maturity Date will vary based on the insured's issue
Policy Specifications	Pg 3	<ul><li>age.</li><li>The Schedule of Benefits will change based on the benefit selection of the policy owner.</li></ul>
Policy Specifications	Pg 3	- The Beginning premium payment date will vary based on when the policy owner chooses to make a payment.
Policy Specifications	Pg 3 (cont'd)	<ul> <li>The Maximum Surrender Charge Premium and The Initial Maximum Surrender Charge will vary based on the specified amount of the policy and the issue date.</li> </ul>
Policy Specifications & Add'l Policy Specs	Pg 3 (cont'd) & Pg 21	- The Maximum Monthly Expense charge per \$1,000 of Specified Amount (for the first 120 months following the policy date will vary based each insured's rate class, issue age and gender (if applicable). The minimum charge is 0.296 and the maximum charge is 3.830.
Add'l Policy Specs	Pg 21 (cont'd)	- The Table of Guaranteed Maximum Monthly Cost of Insurance Rates per \$1,000 and The Table of Monthly No-Lapse Cost of Insurance Rates will vary based on each insured's rate class, issue age, gender (if applicable), reclassification and policy duration.
Policy Specifications	Pg 3	- The Overloan Protection Benefit Agreement Specified Loan Percentage and the No-Lapse Percent of Premium Charge will vary in the event the Company would wish to change this information. Any changes would be filed with the state and would only apply to new issues.
Add'l Policy Specs	Pg 21 (cont'd)	- The No-Lapse Tier Growth Percentage will vary based on the specified amount, insured's rate class, issue age, gender (if applicable), policy date and the death benefit option.

Add'l Policy Specs

Pg 21 (cont'd)

- The Tier Interest Rates will vary based on the Specified Amount, insured's rate class, issue age, gender (if applicable), policy date and the death benefit option.

### CONT'D

### Section

Front Cover of
Policy Back
Cover of Policy
Last pg of Rider
OPBA-08

### Page Number

Front Cover of
Policy Back
Cover of Policy
Last pg of Rider
OPBA-08

### **Description**

- We have placed brackets around the signatures and the Company address. The signatures may change based on the individual holding the position of authority to sign the policy form. The address may change if our home office moves to a different location. If the signatures or address change, an informational filing will be sent to the Department prior to use.